

GAO

1

AD-A263 258



DTIC

ELECTE

APR 27 1993

S c D

March 1991

FINANCIAL REPORTING

Framework for Analyzing Federal Agency Financial Statements



DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

93 4 20 00 3

93-08790



7277

412484

Preface

In passing the recently enacted Chief Financial Officers Act of 1990 (Public Law 101-576), the Congress has provided for a centralized financial management structure for the federal government. To support that structure, the act established chief financial officers (CFOs) in each agency and defined their responsibilities. Their responsibilities include providing for the production of complete, reliable, consistent, and timely information which is responsive to the financial information needs of agency management. As a means to achieve this and other purposes of the act, federal agencies are required to prepare annual financial statements beginning in March of 1992 and subject them to audit.

The act also requires the chief financial officer of each agency to submit to the agency head and the Office of Management and Budget, with management's annual report, a description and analysis (D&A) of the status of financial management of the agency. This D&A should include the results of analyses and interpretations of financial statements in a form that is easily understood by persons who do not have the time or the expertise to absorb the detailed information contained in these statements.

We have developed a framework to assist in analyzing federal agency financial statements, which is an essential step toward preparing the required D&A. The framework consists of three components:

- attributes,
- measures and indicators, and
- analytical techniques.

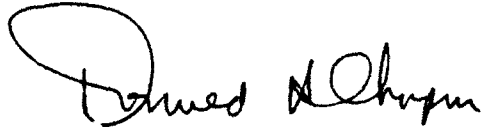
As a case example, we analyzed the financial statements issued by the Department of Veterans Affairs for fiscal years 1986 through 1989, applying the attributes, measures, and techniques set forth in the framework. The results of our analysis are contained in appendix I.

In addition, we are presenting an example of a description and analysis narrative that could be prepared following the application of our analytic framework. This description and analysis serves to illustrate the results of what a CFO might determine to be the most important aspects of an agency's financial operations, focusing in particular on future funding needs. It can also provide an early warning of other potential financial management problems. Specifically, appendix II presents the description and analysis included in our recent report, Financial Audit: Department of Veterans Affairs Financial Statements for Fiscal Years 1989 and 1988 (GAO/AFMD-91-6, November 14, 1990).

DTIC QUALITY INSPECTED 8

Accession For	
NTIS	CRA&I <input checked="" type="checkbox"/>
DTIC	TAB <input checked="" type="checkbox"/>
Unannounced	<input checked="" type="checkbox"/>
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

The major contributors to this study are identified in appendix III.

A handwritten signature in dark ink, appearing to read "Donald H. Chapin". The signature is fluid and cursive, with a large initial "D" and "C".

Donald H. Chapin
Assistant Comptroller General
Accounting and Financial Management

Contents

Preface		1
Chapter 1		6
Introduction	Reasons for Initiating the Staff Study	6
	Objectives, Scope, and Approach	7
	An Overview of the Framework	9
Chapter 2		11
Defining a Focus of Analysis	Importance of Defining a Focus of Analysis	11
	Potential Users and Their Needs	11
	Federal Agency Financial Characteristics	12
	Financial Attributes of Federal Programs and Agencies	13
	Importance of Attributes Varies Depending on Type of Program Analyzed	16
Chapter 3		18
Measures and Indicators	Usefulness of Measures and Indicators	18
	Measures and Indicators for Program Attributes	19
	Measures and Indicators for Agency Attributes	25
Chapter 4		28
Tools for Analyzing Financial Information	Usefulness of Analytical Tools	28
	Trend Analysis	28
	Cross-Sectional Analysis	29
	Structural Analysis	30
	Causal Factor Analysis	31
Appendixes		
	Appendix I: Case Study: Analysis of Department of Veterans Affairs Financial Statements for Fiscal Years 1986 Through 1989	34
	Appendix II: Description and Analysis of VA's Financial Operations	51
	Appendix III: Major Contributors to This Staff Study	68

Glossary	69
----------	----

Bibliography	72
--------------	----

Tables		
Table 1: Financial Attributes, Measures, and Indicators		27
Table I.1: VA's Operating Costs		35
Table I.2: Net Operating Cost of VA's Health Care Program		36
Table I.3: VA Hospital Cost Per Patient Day		37
Table I.4: Staff Ratios of VA Hospitals		38
Table I.5: Average VA Nursing Home Operating Costs		38
Table I.6: VA's Capital Investments in Medical Facilities		39
Table I.7: Occupancy Rates of VA Hospitals		40
Table I.8: Cost of Veterans Benefits		40
Table I.9: Veterans Compensation and Pension Benefits		41
Table I.10: Defaulted VA Home Loans and Loans Outstanding		43
Table I.11: Operating Results of VA's Housing Credit Program		44
Table I.12: Assets and Liabilities of VA's Housing Credit Program		45
Table I.13: Cash Flow for VA's Housing Credit Program		46
Table I.14: Operating Results of VA's Life Insurance Programs		48
Table I.15: VA's Life Insurance Reserve and Investments		49

Figure	Figure 1: Components of the Framework	10
--------	---------------------------------------	----

Abbreviations

CFO	chief financial officer
CPA	certified public accountant
D&A	description and analysis
FASB	Financial Accounting Standards Board
FTE	full-time equivalent employees
GAAP	generally accepted accounting principles
GAO	General Accounting Office
GSA	General Services Administration
OMB	Office of Management and Budget
VA	Department of Veterans Affairs

Introduction

This staff study provides a framework that can assist in analyzing federal department and agency financial statements. This analysis is essential in developing the description and analysis (D&A) required under the CFO Act of 1990.

This chapter explains

- why we initiated this staff study;
- the study's objective, scope, and approach; and
- the major components of the framework.

Reasons for Initiating the Staff Study

Since 1984, we have required in GAO's Policy and Procedures Manual for Guidance of Federal Agencies, Title 2, that all federal departments and agencies prepare and issue a complete set of financial statements consolidated at the departmental level. These statements include a statement of financial position, a statement of operations, a statement of changes in financial position, and a statement of reconciliation to budget reports.

The recently enacted Chief Financial Officers Act of 1990 (Public Law 101-576) reinforced the requirement that federal agencies prepare annual financial statements that will be subject to audit. The act also requires that agency CFOs submit an annual report to the agency head and the Director of the Office of Management and Budget (OMB) to include not only the agency's financial statements and relevant audit report, but also an analysis of the status of the agency's financial management—a description and analysis.

The D&A should be presented in a form that is easily understood by persons who do not have the time or the expertise to understand the implications of the detailed information contained in financial statements.

Two steps are required in preparing the D&A. The first step involves applying the set of attributes, measures, and techniques discussed in this framework to the financial statements. The second step involves summarizing the application of this framework in a narrative form. The resulting D&A should (1) discuss the most important aspects of an agency's financial operations, (2) relate financial data to other measures of performance, (3) discuss the causes of trends in financial indicators over time, and (4) make the Congress and other organizations with oversight responsibilities aware of future funding needs or other potential problems.

Objectives, Scope, and Approach

Objectives. Our first objective was to develop a framework, consisting of concepts, measures, and techniques, which could be used to analyze federal agency financial statements. The study's second objective was to apply this framework to an agency's financial statements; in our example, the Department of Veterans Affairs. The analytical concepts and techniques are developed to provide legislators, top officials of the executive branch (department secretaries, their deputies, and agency administrators), and other government planners and managers, with a means to better understand and use information contained in federal agency financial statements. Financial analysts and accountants either within or outside the federal government should also find the framework useful. For example, a financial analyst may identify a specific area of an entity's operations that warrants further detailed analysis. While not the primary purpose of this framework, the attributes, measures, and techniques included here could be used to carry out that more detailed analysis.

The framework addresses the following questions:

(1) What are the financial attributes of an agency and a program on which to focus the analysis of agency financial statements? We have defined a number of financial attributes for federal agencies and programs. A financial attribute, as the term is used in this staff study, is a distinct financial aspect of an agency or program. For example, operating costs and financial condition are two financial attributes of a federal program.

(2) How can each financial attribute be measured, and what indicators, if any, can be developed to help make inferences about a financial attribute? We have identified certain measures and indicators for each of the agency and program financial attributes. As the term is used in this study, measures are quantitative gauges of a financial attribute. For example, the net operating cost of an agency is measured in dollar amounts by subtracting the agency's revenues from its accrued expenses. The term indicator refers to a quantity in terms of dollars, percentages, or other numerical figures, that assists users in making a judgment about the significance, magnitude, or direction of change in a financial attribute. For example, in commercial-type entities, the ratio of assets to accrued liabilities is considered an indicator for an entity's level of solvency.

(3) What analytical tools are available to use in analyzing federal agency financial statements? The framework introduces several analytical techniques that can be applied to the analysis of federal agency financial statements. They include trend analysis, cross-sectional analysis, and structural analysis. The framework emphasizes that to the extent possible, analysts need to identify underlying events and circumstances that would help to explain their findings in analyzing the financial data.

Scope. The scope of this study is limited to the analysis of financial statements issued by federal departments and agencies on a yearly basis and prepared in conformity with generally accepted accounting principles (GAAP), as set forth in Title 2.¹ Throughout this study, the word "agencies" is used to refer to federal departments and agencies. Our study was not directed to include government-sponsored enterprises or government corporations. However, the framework developed in this study may be useful in analyzing those entities.

Approach. In developing the framework, we relied on knowledge gained from a literature review in two areas. The first area pertains to federal government accounting and finance. In this area, we studied the general structure and format of financial statements issued by federal agencies to understand what elements of information are available. We then reviewed several books and publications, including GAO's previous studies, related to potential uses of federal government financial statements and federal government budgeting and financing processes. (See the bibliography.) We then identified the key financial attributes that should be the focus of analysis of federal agency financial statements.

Regarding the general methodology of accounting and financial analysis, we reviewed a number of books on financial report analysis for corporations and state and local governments. Although the focus of analysis for private sector firms and for state and local governments differs from that of the federal government, many analytical methods found in the books we reviewed can be applied to the analysis of federal agency financial statements. Based on knowledge obtained in the area of general methodology in accounting and financial analysis, we developed a number of measures and indicators for analyzing federal agency financial statements.

¹In October 1990, GAO, the Department of the Treasury, and the Office of Management and Budget reached an agreement to establish the Federal Accounting Standards Advisory Board. The Board will consider federal accounting issues, standards, and principles for purposes of improving federal financial accounting and reporting.

Also, as a part of this staff study, we analyzed the financial statements issued by the Department of Veterans Affairs (VA) for fiscal years 1986 through 1989 and audited by GAO,² applying the analytical concepts and techniques developed in this staff study. The analysis is included in appendix I. To illustrate how those concepts, measures, and techniques were applied in the analysis, we have included numerous examples throughout this study.

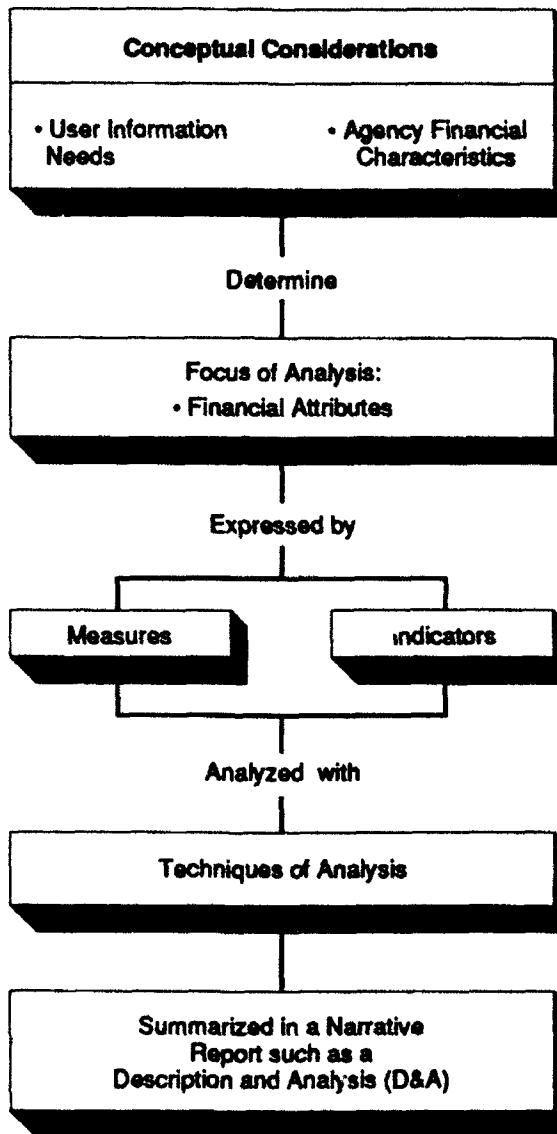
An Overview of the Framework

In summary, the framework that we have developed consists of the following: (1) conceptual considerations related to federal agency financial characteristics and users' information needs that govern the selection of a focus of analysis, (2) financial attributes of federal agencies and programs on which to focus an analysis of federal agency financial statements, (3) measures and indicators for the financial attributes, and (4) analytical techniques.

Chapter 2 discusses users' information needs, federal agency financial characteristics, and the financial attributes selected as focal points for analysis. Chapter 3 discusses measures and indicators for the financial attributes. Finally, chapter 4 discusses the analytical tools that can be used in analyzing federal agency financial statements. The relationships among the framework's components are depicted in figure 1.

²See the following GAO audit reports: GAO/AFMD-89-23, dated Nov. 30, 1988; GAO/AFMD-89-69, dated Sept. 15, 1989; and GAO/AFMD-91-6, dated Nov. 14, 1990.

Figure 1: Components of the Framework



Defining a Focus of Analysis

Importance of Defining a Focus of Analysis

A fundamental task in analyzing federal agency financial statements is to define a focus of analysis, that is, to select the elements of information on which the analyst should concentrate. A proper focus assures that the analysis provides information that is essential to managing federal government finances and resources and relevant to the needs of those who use the analysis. Without a proper focus, the analysis could become an aimless and useless number-crunching effort. Erich A. Helfert states in Techniques of Financial Analysis:

"In financial analysis there is often a temptation to run all the numbers—yet normally only a few relationships will yield the information and insights the analyst needs. A ratio can relate any magnitude to any other, such as net profit to total assets, or current liabilities to current assets. The choices are limited only by the analyst's imagination. The actual usefulness of any particular ratio, however, is strictly governed by the specific objectives of the analysis."¹

Potential Users and Their Needs

In order to define a proper focus, analysts must understand not only the objectives of their analysis, but also their users' needs. A clear understanding of the needs of the users enables the analyst to focus on the information relevant and useful to those needs.

The CFO act identifies the Congress, department heads, and other officials in the executive branch as users of federal agency financial information. In the early 1980s, GAO and the Office of the Auditor General of Canada conducted a joint study on users of federal government financial information.² The Joint Study also identified legislators and government planners and managers as primary users of federal government financial statements.

According to the Joint Study, users need federal government financial information for the following reasons: (1) to enhance their understanding of government operations, (2) to have a common data base for analyzing, developing, and debating policy positions, (3) to have a historical perspective from which to consider future plans, budgets, and spending proposals, (4) to assess agency accountability for actual fiscal

¹Erich A. Helfert, Techniques of Financial Analysis 6th ed. (Homewood, Illinois: Richard D. Irwin, Inc., 1987) pp. 19-20.

²The Joint Study published four reports in March 1986 under the titles Federal Government Reporting Study: Summary Report (GAO/AFMD-86-30), Illustrative Annual Financial Report of the United States Government (GAO-AFMD-86-30A), Illustrative Annual Financial Report of the Government of Canada, and Detailed Report (GAO-AFMD-86-30B).

results in comparison with budgets, and (5) to evaluate program efficiency and cost-effectiveness.³

To serve users' needs, analyses of federal agency financial statements need to focus on information that reflect the essential and relevant financial characteristics of federal agencies and programs. A good understanding of the characteristics will help the analyst highlight information useful in analyzing the financial operations of federal agencies and programs.

Federal Agency Financial Characteristics

Two financial characteristics are significant in analyzing federal agency financial statements. First, federal programs and agencies constitute units of operations and budget decisions. Second, federal programs generally cost money, rather than earn money, in carrying out their missions. For purposes of financial statement analysis, each program can be viewed as a cost center of the federal government. These two characteristics and their implications on financial statement analysis are further explained below.

Federal programs constitute units of operations and budget decisions. Federal funds are appropriated for individual programs based on their goals and financial needs. Federal policy decisions are also based on the costs, benefits, and effectiveness of individual programs. Because of this characteristic, it is important that financial data pertinent to individual programs be analyzed. Such information is useful for evaluating program policies and in making program planning and budgeting decisions.

The program based analysis is particularly important for an agency which operates multiple programs with diverse objectives, functions, and activities. Each of the programs may have its unique operating characteristics and environment. For example, VA administers veterans health care, life insurance, compensation and pension benefits, and home loan guarantee programs. Those programs are dissimilar in their operations. In such circumstances, an analysis of program specific accounting data can provide useful and relevant information for the evaluation of program efficiency and effectiveness.

Each program can be viewed and analyzed as a cost center of the federal government. Federal programs generally rely on appropriated funds to carry out their missions. In other words, each program consumes

³Federal Government Reporting Study, Detailed Report (GAO/AFMD-86-30B), p. 15.

resources in providing services to the nation and the public. Thus, from a financial analysis standpoint, a federal program is a cost center of the federal government. For this reason, the most important financial information about a federal program is usually its operating costs as well as the costs for acquiring land, building, equipment, facilities, and other assets. A financial statement analysis needs to focus on program costs and how they are financed, including appropriations received and liabilities incurred.

Some federal programs carry out certain commercial functions, such as buying and leasing real estate, providing insurance, and making loans and loan guarantees. Although they usually operate with trust funds or revolving funds, these programs also incur costs to taxpayers when their expenses and losses exceed their revenues. Such programs would also incur liabilities to commercial lenders or other non-federal entities, which will require payment with federal resources. Thus, the financial condition and operating results of each commercial-type program needs to be subject to careful analysis in order to assess their current cost and their future demand for federal resources.

Financial Attributes of Federal Programs and Agencies

Based on users' objectives, as identified in the Joint Study, and based on the agency financial characteristics, as described above, we identified six program financial attributes that should form the focus of financial statement analysis. In addition to these program financial attributes, we identified four financial attributes that apply to agencywide financial statements. These program and agency financial attributes are explained below. (Chapter 3 explains how each of the financial attributes should be measured and what indicators can be developed.)

Program Attributes

Operating costs. This attribute represents how much it costs to operate a program. Information on the cost of a program's operations is useful for budgeting, planning, and cost control purposes. For example, for planning and budgeting purposes, the information serves as feedback to compare with budgeted costs, and as a basis to project the program's operating costs in future years. Unlike operating costs accounted for on a cash basis, operating costs accounted for on the accrual accounting basis under GAAP include expenses and losses that have been incurred in one accounting period but were not paid for in cash until a subsequent accounting period. The information disclosing accrued operating costs is useful in assessing a program's financial commitment and its requirements for cash outlays in the future.

The information related to program operating costs is also useful in evaluating program operating economy and efficiency, comparing program costs and benefits, and assessing alternatives to reduce costs.

Operating results. This attribute concerns whether a program's operations resulted in an excess of expenses over revenues and appropriations or vice-versa. For purposes of this study, an excess of expenses over revenues and appropriations is referred to as an operating deficit, and an excess of revenues and appropriations over expenses is referred to as an operating surplus.⁴

The accumulation of net losses from year to year in a commercial-type activity weakens a program's financial condition, and signals the existence of financial difficulties. The information relating to a commercial-type activity's operating results is therefore important for assessing the financial risks of a program, its needs for financial assistance, and its potential cost to taxpayers.

Operating efficiency. This attribute relates to the performance of a program in terms of how much it accomplished in comparison with the resources it consumed.

The information on a program's operating efficiency can help evaluators assess management's effectiveness in using resources. The information would also help managers improve program operations.

Capital investments. This attribute represents the money that a program spends for the acquisition of long-term assets, such as land, buildings, equipment, and other facilities. These assets benefit both current and future operations. Capital investment information⁵ is significant for long-term planning decisions, since the acquisition of assets represents a major commitment of resources that will affect the program's performance over future periods.

Financial obligations. This attribute represents the liabilities that a program incurs in its operations or asset acquisitions. A program incurs liabilities in two ways: (1) when it borrows money from the Treasury,

⁴The terms operating deficit and surplus are not provided in Title 2. They are used in this study for purposes of analyzing agency financial statements only.

⁵Budget Issues: Restructuring the Federal Budget—The Capital Component (GAO/AFMD-89-52, August 24, 1989), p.1.

other agencies, or from the public, and (2) when it incurs costs or losses under a financial commitment that will be paid in the future.

On some occasions, federal agencies borrow to finance their programs. The General Services Administration (GSA), for example, issues "participation certificates" to the public to finance its construction projects. Also, loan guarantee programs typically accrue liabilities for losses associated with the default of guaranteed loans. Insurance, pension, and compensation programs accrue the cost of benefits that will be paid in future years. The information relating to a program's financial obligations is important because financial obligations represent a future demand for resources and, thus, future costs to taxpayers.

Financial condition. This attribute is defined as the financial health of a program and its inherent ability to generate financial resources to maintain its operations and to meet its financial obligations, when they are due, without considering financial assistance (such as additional appropriations).

The focus of this attribute is more applicable to commercial-type programs which operate with revolving funds or trust funds, and are designed to be self-supporting, than to government-type programs that generally rely on appropriated funds to finance their operations, and are limited by spending authority.

The information relating to a commercial-type program's financial condition provides a comprehensive assessment of a program's financial viability to program managers and other decisionmakers in the planning, budgeting, and program evaluation processes. The related information helps the decisionmakers and program managers evaluate and identify areas where financial difficulties or weaknesses may exist, as well as assess the program's future financing requirements.

Agency Attributes

We have identified four financial attributes that form the focus of analysis applicable to agencywide financial data. These attributes are: (1) operating costs, (2) capital investments, (3) efficiency in managing agency assets, and (4) efficiency in managing agency administration costs. The first two are similar to attributes identified for programs, and the latter two are unique to agencies.

Operating costs. This attribute relates to how much it costs to operate an entire agency and its programs for a fiscal year. For budgeting and

planning purposes, it is useful to know the aggregate amount of resources required by an agency to operate its programs.

Capital investments. This attribute represents the total amount of money that an agency spent to acquire capital assets for itself and its programs. The agencywide capital investment information is useful for long-term planning purposes.

Efficiency in managing agency assets. Some agencies manage certain assets, such as accounts receivable and inventory, as well as buildings, facilities, and other long-term assets in a centralized fashion. Analysis of the agency data should focus on how efficiently each of the assets was managed by the agency. The analysis would provide information useful in improving the efficiency and economy in maintaining, controlling, and utilizing agency resources.

Efficiency in managing agency administration costs. This attribute relates to how efficient an agency is in managing its general administrative costs. Such costs are typically incurred at the agency level, and are not within the control of program managers. Thus, central agency management is accountable for managing those costs. The information relating to agency general administrative costs is useful in evaluating management performance in this area.

Importance of Attributes Varies Depending on Type of Program Analyzed

In analyzing federal government programs, the analyst may place a greater emphasis on certain attributes than others, depending on the nature, circumstances, and the operating pattern of the programs. The following examples are provided only to illustrate how the emphasis on attributes would vary in analyses of different programs. These examples, however, do not represent a complete or formal categorization of federal programs.

Public service programs. Some federal programs are established to provide public services. For example, defense programs serve the nation in protecting the security of its people and its territories. Other service programs include VA's health care program for veterans, the programs to improve aviation safety, and the programs to enforce hazardous waste clean-up efforts. For these public service programs, the emphasis of the analysis may be placed on their net operating cost, their operating efficiency, and the net cost of the programs' investment in fixed assets such as equipment and facilities.

Entitlement programs. These programs distribute benefits to persons or entities who meet certain eligibility requirements. For example, the Veterans Compensation and Pension program and Medicare and Medicaid programs provide monetary benefits to qualified persons meeting eligibility criteria. In analyzing these programs, emphasis is usually placed on the cost of the entitlement benefits and the accrued liabilities that the program may have for future benefit payments.

Commercial-type programs. As mentioned earlier, there are also commercial-type programs. Examples are loan guarantee and deposit insurance programs, which assume certain financial risks to protect the public interest or to promote economic activities in the private sector. These programs might incur costs and financial obligations beyond the budgetary control. Loan guarantee programs and deposit insurance programs, for instance, might incur losses and financial liabilities due to loan defaults and failures of deposit institutions. Thus, emphasis in analyzing commercial-type programs is placed on their operating results, financial obligations, and financial condition.

Measures and Indicators

Usefulness of Measures and Indicators

This chapter describes the measures and indicators developed for each of the financial attributes discussed in the preceding chapter. Measures and indicators express financial attributes in quantitative terms: dollar amounts, ratios, and other relevant measurement units, such as miles per gallon in measuring vehicle operating efficiency, and full-time equivalent employees per patient in analyzing hospital operations.

Once measures and indicators are developed for a program, detailed cost analysis should be performed to find, to the extent information is available, changes in costs incurred in each functional area and in each category of cost objects. Techniques for performing detailed cost analysis will be discussed in chapter 4.

Users of federal agency financial information, particularly those who use the information for planning, budgeting, or program evaluation purposes, need to know program and agency financial attributes in quantitative terms. For example, it is not sufficient to indicate that the cost to operate a program is high. For budgeting, planning, and cost-benefit evaluation purposes, users need to know in dollar amounts how much the program costs for a certain time interval, such as a fiscal year. So too, telling a reader that a program's cost increased for a fiscal year is not very meaningful. Users need to know by what dollar amount, or percentage, the cost increased.

Some financial attributes, such as operating costs, can be measured directly in dollar amounts. Other attributes, such as the operating efficiency or financial condition of a program, are not directly measurable in dollar amounts. For this reason, indicators are used to express an attribute in relative or comparative terms. Ratios have been used extensively as indicators in financial statement analysis. For example, the ratio of gross profit to net sales is used to measure a firm's profitability. The nature of financial ratios and their advantages are explained by Baruch Lev, in Financial Statement Analysis: A New Approach:

"Ratios, rates, and percentages expedite the analysis by reducing the large number of items involved to a relatively small set of readily comprehended and economically meaningful indicators."¹

However, the measures and indicators suggested in this chapter are not necessarily appropriate for all agencies and programs. Analysts must

¹Baruch Lev, Financial Statement Analysis: A New Approach (Englewood Cliffs: Prentice-Hall, Inc., 1974), p. 11.

select appropriate measures and indicators for the agency or program analysis on a case-by-case basis. The management of a program is in the best position to define the program's performance goals. In conjunction with those goals, the program's management can adopt certain relevant indicators for purposes of gauging progress toward the program goals.

Measures and Indicators for Program Attributes

In chapter 2, we described six financial attributes for federal programs: operating costs, operating results, operating efficiency, capital investments, financial obligations, and financial condition. The measures and indicators for each of the attributes are described below.

The Operating Cost Attribute

Measure. The cost of operating a program is measured with the net operating cost of the program, which equals the program's total expenses and losses, minus its revenues and reimbursements, before accounting for funds appropriated to the agency. For example, the total operating expenses of VA's health care program for fiscal year 1989 were \$11.7 billion, and the program's revenues and reimbursements were \$0.3 billion. Thus, the net operating cost of the program for that fiscal year was \$11.4 billion. (See appendix I, table I.2.)

The net operating cost measure, considering all the expenses and losses incurred by a program for a fiscal year, and all the revenues and reimbursements that it received, provides users with an accurate picture of how much the program cost the taxpayers. This measure differs from cash outlays of a program, accounted for on a budgetary basis, because the expenses, losses, revenues, and reimbursements are accounted for on an accrual basis, as required by GAAP. Thus, the measure is based on all of the transactions and events that occurred during a fiscal year, regardless of whether cash was paid or received during the year.

Indicator. The percentage change (increase or decrease) in the net operating cost of a program from one year to another serves as an indicator for the trend of the program's operating costs. A better indicator is the average percentage change in the net operating cost over a number of years because it shows a trend of changes.

General price increases due to inflation affect the operating costs of federal programs. To separate real cost changes from the general inflation effect, operating costs in current dollars are converted to constant dollars by the use of an appropriate index, such as the consumer price

index.² For example, for the 4-year period from fiscal year 1986 through fiscal year 1989, the cost per patient day of VA hospitals in current dollars increased by an average of 9.2 percent. When measured in 1986 constant dollars, the cost per patient day increased by an average of 4.8 percent. (See appendix I, table I.3.)

The percentage change in a unit cost can also serve as an indicator. Examples of unit costs are: (1) cost per patient day, calculated by dividing patient days into hospital patient costs, and (2) cost per recipient of veterans pension and compensation benefits. The unit cost indicator can be quite revealing. For example, although the number of patients treated by VA hospitals decreased during the period 1986 through 1989, the cost per patient day, measured in 1986 constant dollars, increased by an average of 4.8 percent. (See appendix I, table I.3.)

The Operating Results Attribute

Measure. A program's operating results for a fiscal year are measured by the difference between the program's net operating cost and the amount of funds appropriated to the program for that fiscal year.

Federal programs are generally prohibited from incurring unfunded expenses beyond their appropriations. The excess of a program's net operating cost over its appropriations usually reflects the routine timing differences between expenses accrued and cash disbursed to pay the expenses. Certain commercial-type programs operating with revolving funds or trust funds, such as loan guarantee and deposit insurance programs, could incur costs due to factors beyond the budgetary control, such as loan defaults by borrowers and financial failures of insured depository institutions. The operating deficit of such programs can be rather significant. For example, VA's housing credit program, which is mainly a home loan guarantee program, incurred an operating deficit of

²The term constant dollar, or real dollar, is used in economic, financial, and accounting literature to refer to a dollar value from which the effect of changes in its purchasing power due to price level changes over time has been removed, and its purchasing power is constant to the base year of that time period. The term current dollar, or nominal dollar, on the other hand, refers to a dollar expressed in its face value when it was spent, received, or recorded. The process of converting nominal dollars to constant dollars, referred to as deflating, is based on a price index (called deflator) which tracks price level changes on a yearly, quarterly, or monthly basis. Among those commonly used are the U.S. Department of Commerce's implicit price deflator and the U.S. Bureau of Labor Statistics' producer price index and consumer price index. The formula to convert a current dollar to a base year constant dollar is to multiply the current dollar amount by the base year index and divide the product by the current year index. See *The McGraw-Hill Dictionary of Modern Economics*, 3rd ed. (New York: McGraw-Hill Book Co. 1979), p. 97. Harry E. McAllister, *Elements of Business and Economic Statistics* (New York: John Wiley & Sons, 1975), pp. 372-373.

approximately \$0.9 billion for fiscal year 1988, after receiving additional appropriations of \$0.9 billion. (See appendix I, table I.11.)

Indicator. The ratio of appropriations received by a program for a fiscal year to the program's net operating cost is an indicator which shows the extent to which the net operating cost incurred was financed by appropriated funds. A complementary indicator is the ratio of the operating deficit or surplus to the net operating cost, which shows the extent of financial deficiency or surplus. For example, the net operating cost of VA's housing credit program for fiscal year 1988 was \$1.8 billion. The program's additional appropriations for that year were \$0.9 billion, or 50 percent of the program's net operating cost, and the financing deficiency was also 50 percent. (See appendix I, table I.11.)

The Operating Efficiency Attribute

Measure. The operating efficiency of a program is generally evaluated by inputs (efforts and resources) required to produce the program's outputs (services and goods); or, the units of inputs required to produce a unit of output.³ Often an accurate measurement of a program's input and output requires specific statistical data not routinely available in the financial statements of an agency. For example, in order to measure the input and output of the veterans' education program, one needs detailed statistical data relating to costs and education or training given to veterans at various levels. For the analysis of hospital operations, one needs statistical data, such as daily inpatient census, number of hospital beds, and number of full-time equivalent employees.

Indicator. The efficiency of hospital operations can be measured by the cost per patient day, or the number of full-time employees per patient.⁴ Such an indicator would alert the program management to an area where attention is needed to study the program's operating efficiency. However, as discussed in chapter 4, indicators of that type cannot be taken as conclusive measures of a program's operating efficiency. The increase in the cost per patient day, for example, may be caused by factors not related to operating efficiency, such as the type of diseases treated and medical technologies required.

³A more detailed discussion on this subject can be found in Paul K. Brace, et al., Reporting of Service Efforts and Accomplishments, Financial Accounting Standards Board Research Report (Stamford, Conn.: FASB, 1980), pp. 5-8.

⁴Paul K. Brace, et al., Reporting Service Efforts and Accomplishments, p. 36.

The Capital Investment Attribute

Measure. Capital investments of a program are measured by determining the net cost of capital investments, which equals the gross amount of expenditure made to acquire long-term physical and financial assets, less capital recovered from the disposition of long-term assets. Long-term assets, also referred to as capital assets, are assets which benefit future periods. For example, long-term physical assets include land, buildings, equipment, facilities, strategic stockpiles, and reserves. Long-term financial assets include notes and loans receivable and U.S. Treasury securities that a program or agency acquires.

Indicator. A useful indicator of a program's capital investment level is the ratio of the program's net cost of capital investments for a fiscal year to the average balance of the program's long-term assets.⁵ This ratio shows the extent to which a program's plant was renewed or expanded. For example, the average book value of land, buildings, and equipment for VA's health care program was \$8.1 billion for fiscal year 1989. The program's net cost of capital investments for that year was \$1.1 billion, which is 14 percent of the program's capital assets. When reviewed in a trend over a number of years, we found that 14 to 15 percent is a typical ratio level at which VA renews and improves its plant assets for its health care program. (See appendix I, table I.6.) This ratio, which is based on the level of capital investments made in prior years, helps to evaluate the capital requirements in future years.

Changes in price levels due to inflation affect the costs of capital investments. In order to evaluate the real level of capital renewal and expansion during a historical period, capital investments made in that period should be expressed in constant dollars.

Another useful indicator is the ratio of the net cost of capital investments of a program to that of the entire federal government. This ratio indicates whether the program's capital investments have kept pace with the federal government in general. Capital investments of federal programs represent competing needs for the resources of the federal government. National policy emphases would sometimes scale up or down a program's capital budget. The ratio of the net cost of capital investments of a program to that of the entire federal government reveals changes in the program's share of the entire federal government's capital investments.

⁵The average balance of long-term assets of a program for a fiscal year is calculated by adding the balance of the program's long-term assets at the beginning of the year to the balance at the end of the year, and dividing the sum by 2.

**The Financial Obligation
Attribute**

Measure. A program's short-term financial obligations are measured by the amount of the program's current liabilities. Some of them represent accrued salaries and benefits at the end of a fiscal year. Current liabilities need to be paid within a year, either with cash available, or with anticipated appropriations for that year.

A program's long-term financial obligations are measured by the amount of the program's long-term liabilities. These liabilities represent the amount of cash that the program will need to pay its obligations when they become due.

Indicator. For short-term obligations, the ratio of current assets to current liabilities is an indicator of a program's ability to pay its obligations that will be due within a year. For purposes of calculating this ratio, current assets include cash, notes, and other receivables that can be collected within a year. Current liabilities include accounts, notes, and other obligations payable within a year.

For long-term obligations, a program's long-term liabilities should be segregated into categories according to how the liabilities were incurred. In some circumstances, a group of assets is reserved or earmarked to pay a certain category of obligations when they become due. This is typical with pension trust or insurance funds. Other programs, such as loan guarantee programs, however, may incur liabilities without a sufficient internal funding source. The funding adequacy ratio, which equals the amount of reserved assets divided by the amount of liabilities, is applicable to those covered liabilities. It indicates the extent of liabilities covered by available assets. For example, at the end of fiscal year 1989, VA's life insurance programs had \$12.2 billion in accrued benefit obligations (insurance policy reserve and reserve for participating policyholders' interest), and at the same time, the programs had \$12.8 billion of invested assets available to pay veterans life insurance benefits. The funding ratio of VA's life insurance programs exceeded 100 percent. (See appendix I, table I.15.) When reviewed over a number of years, the funding adequacy ratio helps reveal whether the funding level has improved or worsened in recent years. The ratio is indicative of the financial soundness of a program. For example, a 90 percent funded program is financially healthier than a 50 percent funded program.

**The Financial Condition
Attribute**

Measure. The purpose of analyzing the financial condition of a program is to determine whether the program has adequate resources to carry out its operations and to satisfy its obligations when they become due.

The analysis is particularly pertinent to commercial-type programs that operate with revolving funds or trust funds and are designed to be financially self-supporting. Financial condition is a multidimensional concept. We cannot use any single measure to gauge the financial condition of a federal program. However, we provide several indicators below which will help analysts and users of agency financial statements form a conclusion about the financial condition of a program.

Indicator. The amount of cash shortfall or surplus is an indicator of a program's financial condition. Cash flow analysis is an effective tool for evaluating the financial condition of a commercial-type program. In doing a cash flow analysis, the analyst compares a program's available sources of cash with its future needs for cash to determine whether the program will have adequate cash to continue its operations and to satisfy its obligations. In cases where cash shortfalls are projected, the analyst may also determine the amount of financial assistance the program would need through additional appropriations.

In order to make an accurate judgment about a program's financial condition, it is important to analyze each source and use of funds. In analyzing VA's home loan guarantee program, for example, sources of funds that need to be analyzed include revenues from loan origination fees, interest income, and proceeds from sales of loans and foreclosed property. The program's use of funds includes acquisitions of foreclosed property, repurchases of loans, and claim payments related to defaults. Our analysis indicates that VA's housing credit program sustained a cash shortfall of \$0.9 billion at the end of fiscal year 1989, which continues a cash shortfall trend begun in 1986. (See appendix I, table I.13.)

Other indicators can also be developed from data available in a program's financial statements. The current ratio can be used as an indicator of a program's liquidity. It is the ratio of the program's current assets to its current liabilities. A current ratio of less than 1 indicates that current assets are not adequate to meet current obligations. The current ratio, however, suffers a shortcoming from looking at a static picture of current assets and current liabilities at the balance sheet date. It does not take into consideration the dynamic cash flows during the year. It also reflects a narrow view that current assets are the only source that would be used to pay current liabilities.⁶

⁶Lloyd C. Heath, Financial Reporting and the Evaluation of Solvency (New York: AICPA, 1978), p. 17.

Closely related to the cash flow analysis is the debt service coverage ratio which equals the program's net income plus depreciation and interest expense, divided by the amount required to pay debt principal and interest due. This ratio tests whether the program can generate enough funds to meet its debt service requirements. This indicator can be used for programs that borrow from the public, such as GSA's construction program.

The balance sheet of a commercial-type program reveals the solvency condition of a program. A program is probably in financial difficulty and would be in need of additional appropriations if its liabilities exceed its assets. Thus, an indicator that can be used to test a program's solvency is the debt-to-asset ratio, which is the ratio of the program's total debt obligations, including accrued liabilities, to its total assets. For example, at the end of fiscal year 1988, VA's housing credit program had \$2.3 billion in assets and \$5.5 billion in liabilities. Thus, its debt-to-asset ratio was 2.4. (See appendix I, table I.12.)

Measures and Indicators for Agency Attributes

In chapter 2, we identified four agency attributes: operating costs, capital investments, efficiency in managing agency administration costs, and efficiency in managing assets. The first two attributes, as well as their measures and indicators, are similar to those identified for programs. Measures and indicators for the latter two agency attributes are explained below.

The Cost Management Efficiency Attribute

Measure. Agency administration costs are measured with the net agency administration cost, which equals the amount of costs that are incurred by an agency and are not allocated to programs, minus the agency's own revenues and reimbursement receipts. However, because sufficient statistical data are not readily available, an agency's efficiency in managing its administration costs cannot be measured conclusively or accurately through a general purpose financial statement analysis.

Indicator. The average annual percentage change is an indicator that can be used to examine and project the direction and magnitude of change in this area. Also used as an indicator is the ratio of the net agency administration cost to the consolidated net operating cost of the agency, which includes the net operating costs of all of the programs that the agency manages. The increase in this ratio indicates a probable decline in the agency's efficiency in managing its administrative costs.

This ratio can also be used to compare different agencies. A lower ratio signifies a higher efficiency in managing agency administration costs.

The Asset Management Efficiency Attribute

Measure. Financial statement analysis, because of its limited scope, does not provide measures of the efficiency in an agency's asset management. The analysis of data contained in an agency's financial statements and other sources of information, such as the agency's annual report, could provide certain indicators that alert agency management to problem areas where special studies and improvements may be needed.

Indicator. Analysis in this area should focus on certain categories of assets that are significant to the agency. For example, for some agencies, because of the nature of their operations, financial assets, such as accounts or loans receivable, constitute a major portion of their total assets, while for others, physical assets, such as inventory or long-term fixed assets, are more significant.

Aging of accounts receivable is a tool that can be used to evaluate the quality of the accounts and the effectiveness of management in collecting amounts due. A high percentage of overdue accounts may indicate a weak control system or ineffective collection efforts. However, data for aging purposes may not be available. In the absence of such data, the ratio of the provision for bad debts to total accounts receivable (or defaulted loans to total loans outstanding) can also be considered as an indicator for the effectiveness of the agency's credit management. A high ratio of bad debts to total loans and accounts receivable outstanding may indicate weak credit policies and practices, conditions that may need to be strengthened in order to reduce losses.

If an agency's inventory consists of materials and supplies that are normally consumed in the agency's operations, the inventory turnover ratio can be used as an indicator of the efficiency of the agency's inventory management. Turnover ratio is calculated by dividing average inventory (the sum of the beginning and the ending inventory divided by 2) into material and supply expense. A relatively higher ratio generally indicates a more economical use of funds invested in inventories. (The inventory turnover analysis, however, does not apply to stockpiling of certain materials by some agencies for strategic purposes.)

Certain ratios can be used to evaluate the capacity utilization of building spaces and facilities. Hospital occupancy rate, for example, can be evaluated by the ratio of average inpatients per day to total hospital beds

available. As another example, the utilization rate of office space can be evaluated by square feet of space per employee. A low capacity utilization rate may indicate the existence of excess capacity or inefficient use of facilities.

Table 1 summarizes the financial attributes, measures, and indicators described in this study.

Table 1: Financial Attributes, Measures, and Indicators

Attributes	(M) = a measure; (I) = an indicator
Operating costs	(M) The net operating cost = expenses – (revenues + reimbursements) (I) Average annual percentage change in the net operating cost (I) Average annual percentage change in unit costs
Operating results	(M) Net operating cost – appropriated funds (I) Appropriated funds/net operating cost (I) Operating deficit/net operating cost
Operating efficiency	(I) Input required per unit of output
Capital investments	(M) Gross capital expenditure – capital recovered from the disposition of assets (I) Net capital investments/average balance of assets (I) Agency or program net capital investments/U.S. government net capital investments
Financial obligations	(M) The amount of liabilities (I) Assets reserved for a liability/the amount of the liability
Financial condition	(I) Cash surplus or shortfalls (I) Net income + depreciation + interest expenses/debt service costs (I) Liquid assets/liabilities due within a year (I) Liabilities/assets
Efficiency in managing assets	(I) Inventory turnover (average inventory/ materials and supplies expense) (I) Percentage of overdue accounts to total accounts receivable; percentage of bad debt provision to total debt outstanding (I) Rate of capacity utilization, such as square feet per employee.
Efficiency in managing administration costs	(I) Annual percentage change in administration costs (I) The net agency administration cost/ the consolidated net operating cost of the entire agency

Tools for Analyzing Financial Information

Usefulness of Analytical Tools

After the financial attributes of an agency or program are properly quantified in terms of measures and indicators, federal agency financial statements should be further analyzed to produce a comprehensive evaluation and interpretation of the program and agency financial attributes. The analysis would attempt to answer such questions as these: Has a financial measure or indicator changed in recent years (or over a longer time period)? And, if it has, by how much? What are the major components of a financial attribute that are responsible for the changes? How do a program's financial measures or indicators compare with similar programs? What are the factors that have caused a program's financial measures and indicators to increase or decrease, or to be higher or lower compared to those of other programs? Findings and conclusions related to those questions will help users of federal agency financial statements better evaluate the historical data, and make better predictions about the future operations in their planning, budgeting, and program evaluation decisions. The analysis will rely on certain analytical techniques—the tools of analysis. We have summarized the most commonly used methods of analysis into four categories: trend analysis, cross-sectional analysis, structural analysis, and causal factor analysis. They are briefly described below.

Trend Analysis

The trend analysis method, also referred to as the time series analysis method, is used to examine the historical behavior of a financial variable, either in a dollar amount or a ratio, over a time span, such as a number of years. The analyst computes absolute changes and relative percentage changes of the variable from one period to the other. The analyst can also compute the average absolute or percentage change over all of the periods under review.

In analyzing VA's health care program, for example, we performed a trend analysis for the average daily census (the average number of inpatients per day) at the VA hospitals, and the average hospital operating cost per patient day for the period 1986 through 1989. We found that the average daily census of VA hospitals declined by an average of 4.9 percent per year over the 4-year period, while VA hospitals' cost per patient day increased by an average of 9.2 percent per year during the same period. (See appendix I, table I.3.)

The VA operating cost per patient day, mentioned above, however, was calculated in current dollars. Increases in the general price level, commonly referred to as inflation, affect many financial variables of agencies, such as their operating costs and asset acquisition costs. In

analyzing the financial data of an agency or program, the analyst needs to know the extent that a variable, such as a certain operating expense, has changed over a number of years due to factors other than inflation. For this purpose, the analyst should convert the dollar amounts of a financial variable from current dollars, as reported on the financial statements, to constant dollars of a relevant year, using an appropriate index, such as the consumer price index. This will help eliminate the effect of inflation.

After converting the average cost per patient day of VA hospitals from current dollars to 1986 constant dollars, using the consumer price index, we found the rate of increase was 4.8 percent per year, as compared to 9.2 percent in current dollars. The difference of 4.4 percent per year in the rate of cost increase was due to inflation. (See appendix I, table I.3.)

Trend analysis is useful in two ways: (1) it provides a clue for further investigation into factors that might have caused the increases or decreases in a financial measure, and (2) it provides a trend to help make predictions about the future.¹ The rate of increase in VA health care costs in past years, for example, helps to evaluate that program's financial needs in coming years. The increases in VA hospitals' cost per patient day warrant further study by VA management for purposes of improving the cost-effectiveness of VA hospitals. It is interesting to note that VA's flexibility to reduce the total number of health care workers may be limited because recent appropriations for medical care have specified minimum funding levels for personnel compensation and benefits. This may have contributed to the increase in VA hospitals' cost per patient day.

Cross-Sectional Analysis

The cross-sectional analysis compares a financial attribute of an entity with the same attribute of entities having similar characteristics. The comparison may also be made with certain reference points, such as a standard ratio, or a recognized norm.

In the for-profit sector, for example, it is a widespread practice to compare a firm's financial ratios with industry-average ratios. Data on industry averages are periodically published by Dun and Bradstreet, Robert Morris Associates, and other institutions.² At this time, however,

¹A more detailed discussion is contained in Baruch Lev, *Financial Statement Analysis: A New Approach* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1974), pp. 36-37.

²See *Financial Statement Analysis: A New Approach*, pp. 37-39.

appropriate cross-sectional data to compare financial measures and indicators of federal programs or agencies are not readily available.³

Nevertheless, cross-sectional analysis presents a useful concept. It can be used as an analytical tool in the federal government sector when data for comparative purposes becomes available. For example, administrative cost ratios, as explained in chapter 3, can be compared among agencies. A lower ratio may indicate a more efficient management of an agency's administrative (or overhead) costs.

Structural Analysis

The structural analysis technique is used to analyze the components of a financial attribute, their relative shares, and changes in the structure of the financial attribute.⁴ A similar method is referred to as the decomposition analysis.⁵ For example, total current assets of an agency are expressed as 100 percent, and each component of current assets, such as cash or accounts receivable, is expressed as a percentage share of the current assets. Each category of the financial statements can be analyzed in the same manner. The total operating cost of a program, as another example, can be broken down into cost components either by objects (such as salaries, supplies, and utilities) or by activities. Each cost component can then be expressed in a percentage share to the total operating cost.⁶

Structural analysis helps the analyst gain insight into the internal structure of an agency's assets, liabilities, expenses, and revenues, or a subgroup within each of the categories. The percentage share information, when examined over a number of years, would reveal changes in the relative shares of the components that comprise an agency's resources, inputs, and outputs. The analyst should evaluate such structural changes in an agency's resource allocations, which will help enable an assessment of their impact on the agency's future performance.

³In analyzing VA's financial data, we considered comparing certain financial measures of its life insurance programs with those of commercial life insurance companies. However, VA's life insurance operation differs from that of a stock life insurance company in some significant aspects. For example, VA's life insurance operating expenses do not include administrative costs, which are significant to a commercial life insurer. In some programs, VA provides life insurance to disabled veterans who do not meet the risk standards of a private insurer. Because of these differences, a comparison of VA's life insurance financial measures with those of the private sector would be of limited use.

⁴Leopold A. Bernstein, Financial Statement Analysis, Theory, Application, and Interpretation, 4th ed., (Homewood, Ill: Richard D. Irwin, Inc., 1989), pp. 80-82.

⁵See Financial Statement Analysis: A New Approach, pp. 47-48.

⁶See Financial Statement Analysis: A New Approach, pp. 47-60.

A broad use of structural analysis is to convert all of the dollar amounts of an agency's financial statements into ratios, using certain aggregate numbers as reference points, such as total assets, total liabilities and equity, and total expenses. Such an overall structural analysis is referred to as the common-size analysis.⁷ The common-size analysis is well suited to inter-agency comparisons because financial data of various agencies are recast into the uniform relative terms—percentage shares. For example, in comparing two loan guarantee programs, the analyst could compare the percentage of loss provisions of the two programs to their respective total guaranteed amounts. Although the dollar amount of the loss provision may be relatively small, a large percentage would indicate that there may be significant problems in the loan guarantee program that would warrant future investigation to determine the nature of the problems and their causes.

Causal Factor Analysis

With respect to significant changes over time in financial measures and indicators, it is important for the analyst to search for, to the extent possible, factors that have directly or indirectly affected or influenced the changes. The causal factors are referred to in financial literature as determinants.⁸ An analysis of causal factors helps explain what caused the changes in a financial attribute in the past and would help predict future changes.

In analyzing the cost of the Veterans' Compensation and Pension program, for example, the number of benefit recipients and the cost of living adjustments are two determinants that would directly affect the program cost attribute. Changes in the number of recipients would help explain increases or decreases of the program cost. As another example, a determinant of the cost of the Aid to Families with Dependent Children program would be the number of families that are eligible to receive financial aid.

The analysis of causal factors or determinants is useful in program analysis, but it would be less effective, or not applicable in certain circumstances, to the analysis of the consolidated statements of an agency that operates more than one program. Each program operates in its own

⁷Leopold A. Bernstein, *Financial Statement Analysis, Theory, Application, and Interpretation*, pp. 80-82; also Charles H. Gibson and Patricia A. Frishkoff, *Financial Statement Analysis*, 3rd ed. (Boston, Mass.: PWS-KENT Publishing Co., 1986), p. 112.

⁸A detailed discussion on determinants for analyzing the financial condition of state and local governments is contained in Robert Berne and Richard Schramm, *The Financial Analysis of Governments* (Englewood Cliffs, N.J.: Prentice Hall, 1986), pp. 79-85.

environment and may be exposed to a unique set of determinants. However, there may not be a set of common determinants applicable to the agencywide data.

We should point out, however, that financial and statistical data available in an agency's financial statements are limited. A general purpose analysis of agency financial statements cannot provide all of the correct causal factors to explain the changes that may have occurred in an agency's financial attributes. It sometimes requires an in-depth operational analysis or management review to find factors both internal and external to the agency management. The primary role of a financial statement analysis is to highlight and interpret the changes that took place in the financial condition and operating results of a program or an agency.

Case Study: Analysis of Department of Veterans Affairs Financial Statements for Fiscal Years 1986 Through 1989

In this case study, we analyzed financial statements issued by the Department of Veterans Affairs (VA) for fiscal years 1986 through 1989. Those financial statements were audited by GAO.¹ This case study presents the results of our application of some of the concepts and techniques for analyzing federal agency financial statements described in the study.²

VA's mission is to provide benefits and services to the nation's veterans and their beneficiaries. Its financial statements present information related to five program activity areas: (1) veterans medical care, (2) veterans benefits, which include pension and compensation payments, education, rehabilitation, and burial service, (3) housing credit assistance, (4) life insurance, and (5) general administration.

The first two areas are by nature governmental activities in which VA provides entitlement benefits and medical services to veterans. Housing credit and life insurance programs are commercial-type programs which receive revenues to recoup all or a part of their operating expenses. General administration represents VA's overall program management.

Our analysis of VA's programs focuses on the following attributes where appropriate: (1) operating costs and results, (2) capital investments, (3) financial obligations, and (4) financial condition, especially the liquidity and solvency of VA's commercial-type housing credit and life insurance programs. In addition, we focused on agencywide asset management.

VA's Financial Highlights

As table I.1 shows, VA's net operating cost for all its programs, which equals total operating costs minus revenues and reimbursement receipts, grew at an average annual rate of 2 percent, from \$26.3 billion for fiscal year 1986 to \$27.9 billion for fiscal year 1989.

¹ Financial data used in this study were based on our audit reports on VA's financial statements published in GAO/AFMD-89-23, 89-69, and 91-6.

² Some aspects of the analysis were also highlighted in the discussion and analysis section of our report to the Congress on our audit of VA's financial statements for fiscal years 1988 and 1989 (GAO/AFMD-91-6). See appendix II. Unlike that report, however, this case study attempts to analyze data related to all relevant VA program and agency attributes.

Appendix I
Case Study: Analysis of Department of
Veterans Affairs Financial Statements for
Fiscal Years 1986 Through 1989

Table I.1: VA's Operating Costs

Dollars in billions					
	Fiscal years				Average change
	1986	1987	1988	1989	
Current dollars					
Total costs and expenses	\$29.3	\$30.9	\$31.9	\$31.1	
Revenues and reimbursements	(3.0)	(3.3)	(3.3)	(3.2)	
Net operating cost	\$26.3	\$27.6	\$28.6	\$27.9	+\$0.5
Annual percentage change		+4.9%	+3.6%	-2.4%	+2.0%
1986 constant dollars					
Net operating cost	\$26.3	\$26.6	\$26.5	\$24.7	-\$0.5
Annual percentage change		+1.1%	-0.4%	-6.8%	-2.0%

When measured in 1986 constant dollars, VA's net operating cost decreased from \$26.3 billion for fiscal year 1986 to \$24.7 billion for fiscal year 1989,³ at an average rate of \$0.5 billion (2 percent) per year.

- The net operating cost of VA's health care program increased 20 percent, from \$9.5 billion for fiscal year 1986 to \$11.4 billion for fiscal year 1989, which equals 41 percent of VA's net operating cost. The cost increase in 1986 constant dollars over the fiscal years 1986 through 1989 was 6.3 percent. The average cost per patient day at VA hospitals in constant dollars increased at an annual rate of 4.8 percent from fiscal years 1986 through 1989, in part because of a decline in the average daily inpatient census of the hospitals and an increase in the ratio of full-time equivalent employees to inpatients. VA hospitals' occupancy rate declined from 73.4 percent to 68.8 percent, while VA nursing homes operated at full capacity, with a fiscal year 1989 occupancy rate of 92.2 percent.
- The cost of veterans compensation, pensions, and other benefits increased 3.2 percent, from \$15.4 billion for fiscal year 1986 to \$15.9 billion for fiscal year 1989, which equals 57 percent of VA's net operating cost. The number of benefit recipients decreased at an average rate of 2.2 percent per year, while the amount of benefit payments per recipient increased 4 percent per year due to cost-of-living increases. As a result, the increase in payments more than offset the decrease in the number of benefit recipients.

³The conversion from current dollars to constant dollars is based on the consumer price index for all urban consumers, not seasonally adjusted, published in *Economic Indicators* by the Council of Economic Affairs. The index is as follows: 1982-84 = 100, 1986 = 109.6, 1987 = 113.6, 1988 = 118.3, and 1989 = 124.0. To determine the 1986 constant dollar amount, the current dollar amount is multiplied by a fraction whose numerator is the 1986 index and whose denominator is the current year index.

- VA's financial risk lies in its home loan guarantee program. Its guaranteed loans in default were about 3.3 percent of the total guaranteed VA loans outstanding and the program does not have adequate resources to meet its obligations related to these defaults. The program had a cash shortfall of \$0.9 billion in fiscal year 1989 and has relied on additional appropriations to cover its cash shortfalls.
- From fiscal years 1986 through 1989, VA's life insurance programs virtually broke even, earning self-generated revenues to recoup their expenses and benefit payments. At the end of fiscal year 1989, the programs had \$12.8 billion of invested assets to support insurance reserves of \$12.2 billion.

Health Care

At the end of fiscal year 1989, VA administered 172 hospitals, 122 nursing homes, 29 domiciliaries, and 235 outpatient clinics to provide medical services to veterans. (Most of the clinics are attached to hospitals.) Those facilities employed more than 226,000 full-time and part-time health care workers.

Operating Costs

As shown in table I.2, the net operating cost of all VA health services amounted to \$11.4 billion for fiscal year 1989, compared to \$9.5 billion for fiscal year 1986, an increase of \$1.9 billion (20 percent). The average annual cost increase was 6.3 percent per year. In 1986 constant dollars, the net operating cost of the veterans health care program was \$10.1 billion for fiscal year 1989, compared to \$9.5 billion for fiscal year 1986.

Table I.2: Net Operating Cost of VA's Health Care Program

Dollars in billions

	Fiscal year				Average change
	1986	1987	1988	1989	
Net operating cost					
Current dollars	\$9.5	\$10.0	\$10.5	\$11.4	\$0.63
Percentage change		+5.3%	+5.0%	+8.6%	+6.3%
1986 constant dollars	\$9.5	\$9.7	\$9.7	\$10.1	\$0.15
Percentage change		+2.1%	+0.0%	+4.1%	+2.1%

For fiscal year 1989, personnel salary and benefits accounted for 62 percent of the health care operating expenses. Supplies and materials accounted for 15 percent, and the remaining 23 percent were for contracted services, utilities, and depreciation.

While VA's financial statements do not segregate health care costs by activities or divisions, VA's annual reports indicate that VA hospital inpatient care costs increased from \$5.3 billion for fiscal year 1986 to \$5.9 billion for fiscal year 1989.⁴ The cost of outpatient care provided by VA clinics increased from \$1.9 billion in fiscal year 1986 to \$2.6 billion for fiscal year 1989. VA nursing home costs increased from \$0.5 billion to \$0.6 billion during the same period. Other costs of approximately \$2 billion were incurred from fiscal years 1986 through 1989 in training, research, and contract services.

Operating Efficiency

In recent years, there has been a tendency to shift extended medical care from hospitals to nursing homes and domiciliaries. During this period, the average daily census of VA's hospital inpatients declined 14 percent, from an average of 56,940 inpatients per day for fiscal year 1986 to 49,040 per day for fiscal year 1989.⁵

At the same time, the average cost per patient day rose significantly, from \$255 for fiscal year 1986, to \$331 per patient day for fiscal year 1989, an increase of 29.8 percent. As shown in table I.3, the average annual increase in the cost per patient day over the 4-year period was 9.2 percent in current dollars and 4.8 percent in 1986 constant dollars.

Table I.3: VA Hospital Cost Per Patient Day

	Fiscal year				Average change
	1986	1987	1988	1989	
Average daily census	56,940	54,564	52,111	49,040	-2,633
Percentage change		-4.2%	-4.5%	-5.9%	-4.9%
Cost per patient day					
Current dollars	\$255	\$273	\$289	\$331	+\$25.3
Percentage change		+7.1%	+5.9%	+14.5%	+9.2%
1986 constant dollars	\$255	\$263	\$268	\$293	+\$12.7
Percentage change		+3.1%	+1.9%	+9.3%	+4.8%

Many factors, such as the types of disease treated and medical technology used, may have caused the increase in average daily cost per patient. However, the cost of maintaining a permanent staff and facility was certainly a major factor. Since this cost is relatively fixed in the

⁴Data are from VA annual reports for fiscal years 1986 through 1989, table 6 in the statistical appendix.

⁵Data are from VA annual reports for fiscal years 1986 through 1989, statistical appendix, table 3.

Appendix I
Case Study: Analysis of Department of
Veterans Affairs Financial Statements for
Fiscal Years 1986 Through 1989

short term, it cannot be reduced at a rate that parallels the decrease in the inpatient daily census. Table I.4 shows that while the average daily census declined 13.9 percent from fiscal years 1986 through 1989, the full-time equivalent employees (FTE) number decreased only 9.1 percent. As a result, the hospital staff ratio increased from 2.42 FTE per inpatient day for fiscal year 1986 to 2.56 FTE per inpatient day for fiscal year 1989.

Table I.4: Staff Ratios of VA Hospitals

	Fiscal year				Total change
	1986	1987	1988	1989	
Full-time equivalent employees	137,954	133,325	130,054	125,403	
Percentage change		-3.4%	-2.5%	-3.6%	-9.1%
Average daily census	56,940	54,564	52,111	49,040	
Percentage change		-4.2%	-4.5%	-5.9%	-13.9%
Average FTE per inpatient	2.42	2.44	2.50	2.56	

In fiscal year 1989, 26,561 patients were treated in VA nursing homes, compared to 23,940 patients for fiscal year 1986, an increase of 11 percent. Table I.5 shows that the average nursing home daily census increased from 10,482 patients for fiscal year 1986 to 11,468 for fiscal year 1989, an increase of 9.4 percent.

Table I.5 also shows that the cost per patient day of VA nursing homes was \$143 in fiscal year 1989, compared to \$118 for fiscal year 1986. In 1986 constant dollars, the average cost per patient day increased from \$118 for fiscal year 1986 to \$126 for fiscal year 1989. The average annual percentage increase in constant dollars was 2.2 percent, less than half the rate of increase in VA hospital per patient day cost.

Table I.5: Average VA Nursing Home Operating Costs

	Fiscal year				Average change
	1986	1987	1988	1989	
Average daily census	10,482	10,945	11,344	11,468	+329
Percentage change		+4.4%	+3.6%	+1.1%	+3.0%
Cost per patient day					
Current dollars	\$118	\$123	\$129	\$143	+\$8.3
Percentage change		+4.2%	+4.9%	+10.9%	+6.7%
1986 constant dollars	\$118	\$119	\$120	\$126	+\$2.7
Percentage change		+0.8%	+0.8%	+5.0%	+2.2%

Capital Investments

In fiscal year 1989, VA spent \$1.1 billion to modernize, expand, and improve medical facilities, compared to \$1.0 billion in fiscal year 1986, an increase of 10 percent. As table I.6 shows, the rate of VA's capital spending for its health care program from fiscal years 1986 through 1989 has been kept at 14 to 15 percent of the average book value of the program's capital assets (land, buildings, and equipment).

Table I.6: VA's Capital Investments in Medical Facilities

Dollars in millions

	Fiscal year			
	1986	1987	1988	1989
Capital investment in medical facilities	\$953	\$955	\$1,078	\$1,128
Percentage change		+0.2%	+12.8%	+4.6%
Average book value of				
VA medical assets ^a	\$6,307	\$6,572	\$7,282	\$8,060
Percentage of acquisitions to book value	15.1%	14.5%	14.8%	14.0%

^aThe average book value of medical assets for a fiscal year is calculated by dividing the sum of the beginning and ending balances of the assets for that fiscal year by 2. However, since no beginning balance data are available for fiscal year 1986, we used the ending balance for that year in lieu of the average balance.

Asset Utilization

The book balance of fixed assets (land, buildings, and equipment) of VA's health care program increased 33 percent, from \$6.3 billion at the end of fiscal year 1986 to \$8.4 billion at the end of fiscal year 1989. Many of VA's construction projects were undertaken to improve or expand nursing homes and clinics. Hospital construction projects were mostly aimed at relocating or modernizing facilities.

The total number of VA hospital beds declined from 77,548 at the end of fiscal year 1986 to 71,311 at the end of fiscal year 1989, a decrease of 8 percent. However, as we have pointed out earlier, the average inpatient daily census of VA hospitals decreased at a higher rate (14 percent) during the same period. As table I.7 shows, the resulting occupancy rate of VA hospitals, calculated by dividing total hospital beds into the average daily census, has declined from 73.4 percent for fiscal 1986 to 68.8 percent for fiscal year 1989,⁶ indicating a growing excess capacity in VA hospitals.

⁶Data are from VA annual reports for fiscal years 1986 through 1989, statistical appendix, table 3.

Appendix I
Case Study: Analysis of Department of
Veterans Affairs Financial Statements for
Fiscal Years 1986 Through 1989

Table I.7: Occupancy Rates of VA Hospitals

	Fiscal year			
	1986	1987	1988	1989
VA hospital beds	77,548	76,213	73,913	71,311
Percentage change		-1.7%	-3.0%	-3.5%
Average inpatient daily census	56,940	54,564	52,111	49,040
Percentage change		-4.2%	-4.5%	-5.9%
Occupancy rates (percentage)	73.4%	71.6%	70.5%	68.8%

By contrast, VA nursing homes have had a much higher occupancy rate. There were 12,402 VA nursing home beds in fiscal year 1989, compared to 11,371 in fiscal year 1986, an increase of 9.1 percent. This rate of increase was slightly less than the 9.4 percent increase in the VA nursing home daily census over the same period. The occupancy rate of VA nursing homes was 92.5 percent for fiscal year 1989, compared to 92.6 percent for fiscal year 1986.

Veterans Benefits

VA pays compensation and pension benefits to eligible veterans. It also provides education and burial benefits.

Operating Costs

The cost of veterans benefits amounted to \$15.9 billion for fiscal year 1989, compared to \$15.4 billion for fiscal year 1986, an increase of \$0.5 billion, or 3.2 percent. The average rate of annual cost increase was 1.1 percent. As table I.8 shows, the cost of veterans benefits in 1986 constant dollars was \$14.1 billion for fiscal year 1989, compared to \$15.4 billion for fiscal year 1986, an annual average decrease of 2.9 percent.

Table I.8: Cost of Veterans Benefits

Dollars in billions					
Cost of veterans benefits	Fiscal year				Average change
	1986	1987	1988	1989	
Current dollars	\$15.4	\$15.3	\$15.6	\$15.9	+\$0.17
Percentage change		-0.6%	+2.0%	+1.9%	+1.1%
1986 constant dollars	\$15.4	\$14.8	\$14.4	\$14.1	-\$0.43
Percentage change		-3.9%	-2.7%	-2.1%	-2.9%

Compensation and pensions, which amounted to \$15.2 billion for fiscal year 1989, accounted for about 96 percent of the cost of veterans benefits. The remaining 4 percent was for veterans education, rehabilitation, burial, and other benefits.

Compensation is paid to veterans with disabilities resulting from or coincident with military service; it is also paid to survivors of veterans whose deaths were service-connected. Pensions are paid to low-income, wartime service veterans who (1) are 65 or older or (2) have become permanently and totally disabled. Pensions are also paid to qualified survivors of deceased wartime veterans.

The number of compensation and pension recipients decreased at an average rate of about 2.2 percent per year, from 3,899,855 cases at the end of fiscal year 1986 to 3,653,690 cases at the end of fiscal year 1989.⁷ The average amount paid per recipient in current dollars has been increasing due to cost-of-living adjustments. As shown in table I.9, it was \$3,661 per recipient for fiscal year 1986, compared to \$4,120 per recipient for fiscal year 1989, an average annual increase of 4 percent. As a result, the total cost of compensation and pension benefits increased at an average rate of approximately 2.1 percent per year, from \$14.3 billion for fiscal year 1986 to \$15.2 billion for fiscal year 1989.⁸

Table I.9: Veterans Compensation and Pension Benefits

	Fiscal Year				Average change
	1986	1987	1988	1989	
Number of recipients (in thousands)	3,900	3,808	3,725	3,654	-82
Percentage change		-2.4%	-2.2%	-1.9%	-2.2%
Average benefit per recipient	\$3,661	\$3,757	\$3,944	\$4,120	\$153
Percentage change		+2.6%	+5.0%	+4.5%	+4.0%
Total Cost (in billions)	\$14.3	\$14.3	\$14.7	\$15.2	\$0.30
Percentage change		+0.0%	+2.8%	+3.4%	+2.1%

Financial Obligations

VA's financial statements do not accrue any liability for future veterans benefit payments, although a footnote to VA's financial statements for fiscal year 1989 disclosed that the present value of total estimated future compensation and pension payments is \$135 billion. The Congress authorizes appropriations for veterans entitlement benefits on an annual basis. For the next several years, we estimate that the total

⁷Data on compensation and pension recipients are from VA annual reports for fiscal years 1986 through 1989, statistical appendix, table 47.

⁸Compensation and pension costs are from note 4 of VA's financial statements for fiscal years 1986 through 1989.

amount of benefit payments is likely to remain at \$15 billion to \$16 billion per year.

Housing Credit Assistance

In the housing credit assistance program, VA provides partial guaranty of home mortgage loans that eligible veterans or qualified survivors of veterans borrow from private lenders. The guaranty enables veterans to obtain home loans under liberal terms, often without any down payment, and at a favorable interest rate. VA has also extended direct loans to veterans buying homes in certain rural areas where they cannot find commercial lenders.

The number of VA guaranteed home loans declined from 4,177,382 at the end of fiscal year 1986 to 3,937,986 at the end of fiscal year 1989. The loans outstanding at the end of 1989 had a total face value of \$152 billion, of which VA had guaranteed about \$60 billion.⁹

The loan guarantee program effectively transfers lending risks from private lenders to the federal government. When a guaranteed loan defaults, VA is obligated to honor its guaranty. In such a situation, VA can either pay the full guarantee amount (principal and interest due) or pay a reduced amount and purchase the foreclosed property. In most cases in the past, VA chose to acquire the foreclosed property. VA then resells the property and becomes a direct holder of vendee loans.

In dealing with default cases, VA is at risk for loss in several ways. First, it has to pay the lender's claim, either in full or in part, when purchasing the foreclosed property. Second, after the foreclosed property is purchased, VA incurs maintenance and sales expenses and may resell the property at a loss. Third, VA resells the vendee loans at a loss either with or without recourse and either for cash or for subordinate certificates. Fourth, when loans sold with recourse default, VA bears the losses. Fifth, VA sustains a loss when it fails to redeem the full amount of the subordinate certificates. As indicated in table I.10, loans in default were about 3.2 to 3.5 percent of guaranteed loans outstanding for fiscal years 1986 through 1989.

⁹Data for the number of guaranteed loans outstanding are from VA annual reports for fiscal years 1986 through 1989, statistical appendix, table 56. The amount of guaranteed loans was reported in note 5 of VA's financial statements for fiscal year 1989.

Appendix I
Case Study: Analysis of Department of
Veterans Affairs Financial Statements for
Fiscal Years 1986 Through 1989

Table I.10: Defaulted VA Home Loans
and Loans Outstanding

	Fiscal year			
	1986	1987	1988	1989
Loans outstanding	4,177,382	4,115,803	4,025,856	3,937,986
Loans in default	133,427	144,912	139,400	130,276
Percentage of defaults	3.2	3.5	3.5	3.3

Operating Results

As shown in table I.11, the program reported a net operating loss of \$0.7 billion for fiscal year 1986, \$1.6 billion for fiscal year 1987, and \$1.8 billion for fiscal year 1988. It then reported a net income of \$0.2 billion for fiscal year 1989. On a cumulative basis, the program had a total net loss of \$3.9 billion for fiscal years 1986 through 1989.

VA's sources of revenue in the housing credit program were loan origination fees, which equal 1 percent of guaranteed loans and direct loans,¹⁰ and interest on direct loans. Total revenues were \$0.4 billion for fiscal year 1986, \$0.5 billion for fiscal year 1987, \$0.2 billion for fiscal year 1988, and \$0.3 billion for fiscal year 1989.

For VA's housing credit program, accrued expenses were \$1.1 billion for fiscal year 1986, \$2.1 billion for fiscal year 1987, \$2 billion for fiscal year 1988, and \$0.1 billion for fiscal year 1989. This amount covers many items, including losses on sales of loans and foreclosed property, property maintenance expense, property sales expense, the provision for accrued losses on direct loans and foreclosed homes, and, most importantly, the provision for accrued losses from defaults of guaranteed loans.

¹⁰The Veterans Home Loan Indemnity and Restructuring Act of 1989 (Public Law 101-237), enacted in December 1989, authorized a funding fee of 1.25 percent to be collected on guaranteed loans. The fee on vendee loans continues to be 1 percent. The fees collected on loans originated on or after January 1, 1990, however, are required by law to be deposited in the newly established Guaranty and Indemnity fund and may not be used to pay default expenses for loans made prior to January 1, 1990.

Appendix I
Case Study: Analysis of Department of
Veterans Affairs Financial Statements for
Fiscal Years 1986 Through 1989

**Table I.11: Operating Results of VA's
Housing Credit Program**

Dollars in millions				
	Fiscal year			
	1986	1987	1988	1989
Revenues				
Fees	\$258	\$341	\$135	\$141
Interest income	184	191	168	165
Reimbursements	(1)	(45)	(66)	7
Total revenue	441	487	237	313
Expenses and losses	1,094	2,132	2,032	110
Net operating income (loss)	(653)	(1,645)	(1,795)	203
Additional appropriations	139	675	940	763
Operating surplus (deficit)	\$(514)	\$(970)	\$(855)	\$966

The fluctuation in the amount of losses and expenses was caused by increases or decreases in the level of loss provisions on direct loans and foreclosed property held for resale and on guaranteed loans.¹¹ The level of loss provision is determined through a statistical methodology based on historical default experience and economic forecasting. In fiscal years 1987 and 1988, VA added \$1 billion each year to its loss provision for the potential default of guaranteed loans. This additional provision increased the reported losses and expenses by \$1 billion for each of those 2 years. For fiscal year 1989, however, the level of provision was reduced by \$1 billion, thus decreasing VA's housing credit expenses by \$1 billion for that fiscal year. As a result, VA reported a net operating income of \$0.2 billion for fiscal year 1989.

Financial Condition

As shown in table I.12, assets of VA's housing credit program decreased from \$2.5 billion at the end of fiscal year 1986 to \$2.2 billion at the end of fiscal year 1989. Direct home loans, net of an allowance for bad debts, accounted for 45 percent of the total program assets. Foreclosed property held for resale accounted for 32 percent. Subordinate certificates acquired on sales of loans accounted for 14 percent. The remaining 9 percent, which amounted to \$219 million, were cash deposits with the U.S. Treasury.

¹¹Data are from footnote 5 to VA's financial statements for fiscal years 1986 through 1989.

During that same period, the program's liabilities increased by 22 percent, from \$3.7 billion at the end of fiscal year 1986 to \$4.5 billion at the end of fiscal year 1989. The \$4.5 billion in liabilities consisted of a \$1.7 billion debt to the U.S. Treasury, \$0.1 billion in accounts payable, and \$2.7 billion in accrued liability on guaranteed loans. At the end of fiscal year 1988, the accrued liability on guaranteed loans was \$3.7 billion, but it was adjusted downward to \$2.7 billion in fiscal year 1989. The adjustment was calculated using a methodology based on current economic conditions and historical experience. In recent years, claim payments due to defaults on guaranteed loans have been about \$0.7 billion per year.

Table I.12: Assets and Liabilities of VA's
Housing Credit Program

Dollars in billions				
	Fiscal year			
	1986	1987	1988	1989
Assets				
Cash	\$0.4	\$0.1	\$0.3	\$0.2
Loans and certificates	1.3	1.3	1.2	1.3
Foreclosed property	0.8	0.9	0.8	0.7
Total	2.5	2.3	2.3	2.2
Liabilities				
Loan guarantee loss reserve	1.7	2.7	3.7	2.7
Debt to Treasury	1.7	1.7	1.7	1.7
Other liabilities	0.3	0.4	0.1	0.1
Total	3.7	4.8	5.5	4.5
Deficit	\$(1.2)	\$(2.5)	\$(3.2)	\$(2.3)

Liquidity and Solvency

VA's home loan guarantee program does not appear to have sufficient assets of its own to meet its accrued obligations. Table I.12 shows that at the end of fiscal year 1989, the program's liabilities totaled more than twice its assets. Foreclosed houses cannot be readily converted into cash. They are usually sold by issuing loans to buyers. VA might be able to sell the loans for cash in the secondary market, but these sales are often made at a discount. Thus, the realizable value of the program's assets is far less than its \$2.7 billion accrued loan guarantee loss liability. Without additional appropriations, the program apparently would not have sufficient resources to pay its accrued liabilities when they become due.

On a cash flow basis, the program cannot generate enough cash in its operations to sustain its liquidity without additional appropriations.

Table I.13 summarizes the sources and uses of cash in VA's housing credit program. As that table shows, proceeds from its loan and property sales merely covered, or fell short of, its cash needs for acquiring foreclosed property and repurchasing default loans. In fact, the transactions of selling and acquiring loans and foreclosed houses resulted in a cash drain of \$0.1 billion in fiscal year 1987 and \$0.5 billion for fiscal year 1988 and \$0.2 billion for fiscal year 1989. In fiscal year 1989, the only sources of cash that the program generated were loan origination fees (\$141 million), interest income (\$165 million), and some reimbursements (\$6 million). The amount of cash available was far less than the amount needed to pay loss claims and other expenses.

Table I.13: Cash Flow for VA's Housing Credit Program

Dollars in billions

	Fiscal year			
	1986	1987	1988	1989
Source of cash				
Revenues	\$0.4	\$0.5	\$0.2	\$0.3
Other receipts	0.0	0.4	0.2	0.1
Sales of loans and property	2.1	2.5	2.2	2.3
Total	2.5	3.4	2.6	2.7
Use of cash				
Acquiring loans and property	(2.1)	(2.6)	(2.7)	(2.5)
Total cash available to settle losses and claims	0.4	0.8	(0.1)	0.2
Claim payments and other expenses	(0.6)	(1.1)	(1.1)	(1.1)
Cash shortfalls	\$(0.2)	\$(0.3)	\$(1.2)	\$(0.9)

Effective January 1, 1990, fees collected from originating new loans will have to be deposited in the newly established Guaranty and Indemnity Fund and may not be used to fund default expenses related to loans made prior to that date. Thus, VA will have less self-generated cash to meet its obligations arising from the default of existing loans. Over the years, VA has obtained additional appropriations to defray its cash shortfalls. This trend is expected to continue in future years.

Life Insurance

VA administers six programs to provide life insurance to veterans of different war eras, including World Wars I and II and the Korean conflict. VA also supervises two life insurance plans operated by commercial

insurance companies which provide coverage to active military personnel and veterans.¹² Of the life insurance programs that VA administers, only the Service-Disabled Veterans Insurance remains open for new policy issues.

Total insurance revenues amounted to \$2 billion for fiscal year 1986 and increased to \$2.2 billion for fiscal year 1989. Premium receipts accounted for about 40 percent of the revenues, and interest income accounted for the remaining 60 percent. As the programs have matured, most veteran policyholders are paying premiums at the capped maximum rates or have finished paying premiums. (Effective 1983, U.S. Government Life Insurance, one of VA's life insurance programs, discontinued collecting premiums from policyholders.) As a result, the proportion of premiums in total insurance revenues has decreased. Interest was earned from the programs' investments in special U.S. Treasury bonds and certificates and, to a lesser extent, in loans to policyholders. The average return on investment was 8.96 percent for fiscal year 1987, 9.02 percent for fiscal year 1988, and 9.1 percent for fiscal year 1989.¹³

The cost of claim payments was \$0.9 billion per year for fiscal years 1986, 1987, and 1988 and was close to \$1 billion for fiscal year 1989. Dividends paid to policyholders amounted to \$1 billion for fiscal year 1989, compared to \$0.9 billion for fiscal year 1986.

On the average, for each revenue dollar received in fiscal year 1989, about 44 cents was used to pay benefit claims, 46 cents was paid out in policy dividends, and the remaining 10 cents was added to reserves. The administrative expenses of VA's insurance programs, ranging from \$26 million to \$27 million per year during the 4-year period, are not covered by life insurance revenues; instead, they are part of VA's general administrative costs paid by appropriated funds.

Operating Results

As shown in table I.14, the life insurance programs in aggregate had a net operating deficit of \$18 million for fiscal year 1986, \$16 million for fiscal year 1987, and \$20 million for fiscal year 1988, but they had a surplus of \$2 million for fiscal year 1989. The operating deficits

¹²Effective September 1, 1988, VA transferred the Veterans Mortgage Life Insurance from a private insurer to its own administration.

¹³The average rate of return was calculated by dividing the average balance of invested assets of VA's life insurance programs into their interest income. The average balance of invested assets is the beginning balance of a fiscal year plus the ending balance of that year divided by 2.

incurred in previous years were largely attributable to the Service-Disabled Veterans Insurance program, which has carried high-risk policies and has received subsidies from appropriated funds.

Table I.14: Operating Results of VA's Life Insurance Programs

Dollars in billions

	Fiscal year				Total change
	1986	1987	1988	1989	
Revenues					
Premiums	\$848	\$878	\$874	\$871	+ 2.7
Interest income	1,166	1,192	1,230	1,274	+ 9.3
Reimbursements	(3)	(8)	78	43	N/A
Total revenue	2,011	2,062	2,182	2,186	+ 8.8
Expenses and losses					
Loss reserve provision	181	230	313	222	+22.7
Claim payments	941	919	936	959	+ 1.9
Policy dividends	907	929	953	1,005	+10.8
Total and losses expenses	2,029	2,078	2,202	2,186	+ 7.7
Net gain (loss)	\$(18)	\$(16)	\$(20)	\$2	N/A

Financial Condition

VA's life insurance programs had \$14.1 billion in total assets at the end of fiscal year 1989, compared to \$13.2 billion at the end of fiscal year 1986, an increase of \$0.9 billion. Over the same time period, the programs' liabilities, mainly insurance reserves, increased \$1.0 billion, from \$13.3 billion at the end of fiscal year 1986 to \$14.3 billion at the end of fiscal year 1989.

Investments in special U.S. Treasury bonds and certificates amounted to \$12.8 billion at the end of fiscal year 1989, accounting for more than 90 percent of the total program assets. The remaining assets, about \$1.3 billion, were mainly loans to policyholders.

Of the liabilities, \$9.1 billion (64 percent), were insurance reserves, \$3.1 billion (22 percent) were reserves for participating policyholders' interest, and the remaining \$2.1 billion (14 percent) were mainly dividends payable to policyholders and their deposits.

Liquidity and Solvency

VA's life insurance programs appear to be self-supporting. As table I.15 shows, reserves for future claims have been fully supported with invested assets. Virtually all the investments are in nonmarketable U.S. Treasury special bonds and certificates. The bonds, normally held to

Appendix I
Case Study: Analysis of Department of
Veterans Affairs Financial Statements for
Fiscal Years 1986 Through 1989

their maturity, will mature during various years and would provide the liquidity that the programs may need in making claim payments.

Table I.15: VA's Life Insurance Reserve and Investments

Dollars in billions				
	Fiscal year			
	1986	1987	1988	1989
Invested assets	\$11.6	\$12.1	\$12.4	\$12.8
Reserve				
Policy reserve ^a	8.3	8.6	8.9	9.1
Participating policyholders' interest	3.1	3.0	3.1	3.1
Total Reserve	\$11.4	\$11.6	\$12.0	\$12.2
Funding rate (percentage of assets to reserve)	101.8%	104.3%	103.3%	104.9%

^aIn its fiscal year 1989 financial statements, VA began to report life insurance reserves in accordance with generally accepted accounting principles (GAAP). VA also restated the reserve balance for fiscal year 1988 in accordance with GAAP. In order to be consistent, we have presented reserves based on GAAP for fiscal years 1986 through 1989 in this table. Under the statutory requirement, the policy reserves of VA's life insurance programs were \$11.4 billion for fiscal year 1986, \$11.6 billion for fiscal year 1987, \$11.8 billion for fiscal year 1988, and \$12.0 for fiscal year 1989.

However, the insurance programs have been able to generate adequate cash in their on-going operations without liquidating assets. The insurance programs generated premium and interest revenues of \$2.2 billion each for fiscal years 1988 and 1989. For each of those years, the programs made \$1 billion in dividend payments to policyholders in addition to about \$1 billion in benefit claim payments.

Asset Management

At the end of fiscal year 1989, VA had \$6.2 billion in accounts, notes, and loans receivable. This amount consisted of \$5.7 billion in accounts and loans receivable from individuals and third-party insurers, \$0.4 billion in interest receivable from the U.S. Treasury, and \$0.1 billion in advances to contractors and employees.

The accounts receivable from individuals and third-party insurers represented defaulted education loans, pension and compensation overpayments, and medical reimbursements from third-party insurers. The gross amount outstanding was \$1 billion at the end of fiscal year 1989, compared to \$2 billion at the end of fiscal year 1986, a decrease of 50 percent. The allowance for uncollectible accounts, mainly from individuals, was \$0.5 billion, 50 percent of the gross amount outstanding at the end of fiscal year 1989.

The loans receivable from individuals represent defaulted guaranteed home loans, direct home loans, and loans made under life insurance policies. The gross amount outstanding was \$4.7 billion at the end of fiscal year 1989, compared to \$2.5 billion at the end of fiscal year 1986, an increase of \$2.2 billion (88 percent). The increase represented the accumulation of defaulted guaranteed home loans from fiscal years 1987 through 1989. VA provided an allowance of \$2.6 billion for uncollectible loans at the end of fiscal year 1989, which equals 55 percent of the outstanding amount. In aggregate, the allowance of uncollectible amounts was \$3.2 billion at the end of fiscal year 1989, 56 percent of the total accounts and loans receivable from individuals and third-party insurers.

General Administration

VA's general administrative cost amounted to \$0.7 billion per year for fiscal years 1986 and 1987 and \$0.8 billion per year for fiscal years 1988 and 1989. For fiscal year 1989, VA's administrative cost equaled 2.9 percent of its net operating cost. Of the \$0.8 billion administrative cost for that fiscal year, \$0.6 billion (75 percent) was for employee salaries and benefits; \$0.15 billion (18.8 percent) was for rents, utilities, and communications; and the remaining \$0.05 billion (6.2 percent) was for other expenses.

VA's administrative costs have not grown significantly in recent years and are expected to remain at comparable levels in the near future.

Description and Analysis of VA's Financial Operations

GAO

United States
General Accounting Office
Washington, D.C. 20548

Comptroller General
of the United States

B-226801

November 14, 1990

To the President of the Senate and the
Speaker of the House of Representatives

This report presents the results of our financial audit of the Department of Veterans Affairs (VA) for the fiscal years ended September 30, 1989 and 1988. Our audit results are summarized in this letter and described in greater detail in our opinion on VA's consolidated financial statements and in our reports on VA's internal control structure and its compliance with laws and regulations. (See appendixes I through III.) VA's financial statements are presented as appendix IV.

In addition to the audit reports normally required by generally accepted government auditing standards, we present later in this letter a discussion and analysis of VA's financial operations. We have also included a statement analyzing VA's appropriation activity and a summary of VA's self-assessment of internal controls under the Federal Managers' Financial Integrity Act (FMFIA). (See appendixes V and VI.) We believe that a financial statement which analyzes appropriation activity is a desirable addition to the standard set of financial statements. It provides a fuller reporting of the relationship between accrual-based statements and the status of appropriations used. We also believe that a summary of an agency's FMFIA report should be part of the agency's annual report and eventually be included within the scope of the independent auditor's work and report.

We believe these additions will provide the Congress and the President greater insight into and understanding of an agency's financial affairs. Taken together, this information represents the kind of financial disclosure that should be made in an annual report by the head of an executive agency, department, or government corporation to the Congress and the President. In this report, we prepared the financial information to provide an illustration of how such information could be similarly presented in other agencies' reports. The only difference would be that, similar to the financial statements presented in this report, the preparation of the additional financial information would be the responsibility of agency management and the independent auditor would attest to its fair presentation.

Results in Brief

In our opinion, except for property and equipment, VA's consolidated financial statements for fiscal years 1989 and 1988 are fairly stated in

Appendix II
Description and Analysis of VA's
Financial Operations

B-228801

accordance with generally accepted accounting principles (GAAP). The property and equipment amounts shown in the financial statements are not accurate primarily because of missing or undocumented values of the assets and the inconsistent adherence to capitalization and depreciation policies by VA's field personnel. The weaknesses in VA's control over its property and equipment accounts are discussed in our report on internal control structure, which is included in appendix II.

VA's financial statements report certain accrued expenses aggregating nearly \$5 billion at September 30, 1989, that will have to be funded principally from future appropriations. These expenses (employee annual leave earned but not taken, life insurance premiums for disabled veterans that are funded by appropriations, and losses on guaranteed housing credit loans) are customarily financed through appropriated funds in the year payment is required. In addition, VA disclosed in the notes to its financial statements that the present value of the currently authorized compensation and pension benefits to veterans, which will also have to be funded by future appropriations, amounted to about \$135 billion at September 30, 1989.

Our discussion and analysis of VA's financial operations, which was based on the audited financial statements and statistical data, budget reports, and other VA program data over the 4-year period ending with fiscal year 1989, shows the following:

- VA's net operating costs decreased slightly from fiscal year 1988 to fiscal year 1989, when they were \$27.9 billion, whereas they increased by \$1.6 billion over the 4 fiscal years from 1986 to 1989. However, such costs, when measured in 1986 constant dollars, decreased by \$1.6 billion, or 6.1 percent, during the 4-year period.
- Costs related to VA's health care program grew at a moderate 6.3 percent annually between fiscal years 1986 and 1989, but this increase is in the context of a continuing decline in the number of veterans served and the occupancy rates in acute care hospitals. Hospital acute care costs, measured on a per patient day basis, have increased 9.2 percent annually. Health care costs can be expected to continue rising at or above this level. However, VA is studying the possible realignment, or change of mission, for its medical facilities, which may influence future funding levels.
- Veterans benefit costs, which are comprised primarily of compensation and pension benefits, stayed basically constant during fiscal years 1986 through 1989, ranging from about \$15.3 billion to \$15.9 billion a year. However, such benefits could increase significantly in the future due to

Appendix II
Description and Analysis of VA's
Financial Operations

B-226801

recent court rulings declaring certain citizens of the Philippines eligible for full U.S. veterans benefits and requiring benefit payments to those Filipino recipients to be paid at the same rates that other recipients are paid.

- About \$2.5 billion of the nearly \$5 billion in accrued expenses at September 30, 1989, that will have to be paid during future years, principally with appropriations, represents accrued losses on outstanding guaranteed loans under VA's housing credit assistance program.
- VA's life insurance program is secure with \$12.2 billion in reserve. These reserves consist of (1) amounts determined under GAAP needed to pay the actuarially determined guaranteed life insurance policy benefits, exclusive of future premium and investment income (\$9.1 billion), and (2) additional amounts VA must hold in reserve to comply with the statutes which establish VA's reserve requirements (\$3.1 billion). This latter amount, under current VA practices, will eventually be distributed to policy holders through dividends or policy enhancements. The Congress can anticipate, though, the need to continue funding, through appropriations, certain unallocated administrative expenses relating to the VA life insurance program and certain premium subsidies and policy claims under several insurance plans. The total of such appropriations amounted to about \$41 million in fiscal year 1989.
- VA has serious problems collecting its receivables and therefore provided a reserve for doubtful accounts of \$3.2 billion as of September 30, 1989.

VA's self assessment of its accounting systems under FMFIA¹ has identified eight areas where its major accounting systems fail to conform with accounting principles and standards for government agencies. These areas include, for example, weaknesses in the controls over property and equipment accounts, security controls at automatic data processing (ADP) centers, and the inability to adequately control funds and effectively detect duplicate payments for the loan guaranty program. As a result of our audit tests, we are not aware of any information which would contradict the matters included in VA's FMFIA reports, and our summary of these reports is included in appendix VI.

In our report on VA's internal control structure, we are recommending that the Secretary of Veterans Affairs direct the Chief Veterans Benefits Director and various responsible assistant secretaries to take certain actions to correct weaknesses we reported concerning property and

¹Under the Federal Managers' Financial Integrity Act of 1982 (31 U.S.C. 3612(b) and (c)) agencies must evaluate and report on their agency internal control and accounting systems to the President and the Congress each year.

Appendix II
Description and Analysis of VA's
Financial Operations

B-230001

equipment accounts, ACP security controls, and the recovery of erroneous veterans benefit payments.

Discussion and Analysis of VA's Financial Position and Operations

This discussion and analysis presents information on VA's operating costs and major assets for fiscal years 1986 through 1989. It is a narrative presentation of the results of an analytical review of financial data for each of VA's programs. Important aspects of VA's financial operations are discussed and relevant trends are pointed out. For some programs, financial data are related to other measures of performance. In addition, we have included information, where appropriate, to make the Congress aware of critical areas, such as VA's debt collection activities or whether a program may need significant future funding.

Highlights of VA's Financial Operations

VA's net operating cost² for fiscal year 1989 was \$27.9 billion, which represents approximately 2.5 percent of the U.S. government's net operating cost for that year. Table 1 shows VA's total cost of operations during the 4 years beginning with fiscal year 1986, a period during which it served a declining veterans population.

Table 1: Net Cost of Operating VA's Programs for Fiscal Years 1986 Through 1989

Program	Net operating cost for fiscal year			
	1986	1987	1988	1989
Health care	\$9.5	\$10.0	\$10.5	\$11.4
Benefits	15.4	15.3	15.5	15.9
Housing credit assistance	0.7	1.6	1.8	(0.2)
Life insurance ^a	0.0	0.0	0.0	0.0
Administration	0.7	0.7	0.8	0.8
Total net operating costs	\$26.3	\$27.6	\$28.6	\$27.9

^aWhile VA's life insurance program operated at slightly greater or less than break-even throughout the 4 years, these operating results are shown as zero due to rounding.

Although VA's net operating cost decreased slightly between fiscal year 1988 and 1989, it grew at an average annual rate of 2 percent over the 4-year period from fiscal year 1986 through fiscal year 1989. However, during this period, VA's net cost of operations, when calculated in 1986

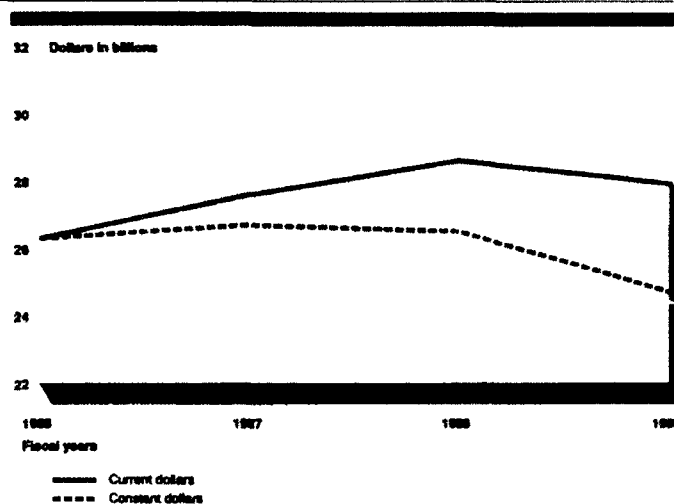
²As used in this report, unless otherwise stated, the term "net operating cost" for health, benefits, and other nonbusiness-type operations is defined as the sum of expenses and benefit payments minus reimbursements and revenues, and before appropriations. For business-type programs, such as the housing credit and life insurance programs, "net operating cost" represents the net loss of the program, also before appropriations.

**Appendix II
Description and Analysis of VA's
Financial Operations**

B-226801

constant dollars, decreased 6.1 percent, or \$1.6 billion overall. Figure 1 depicts VA's net operating costs in both current and constant dollars for the 4-year period.

Figure 1: VA's Net Operating Costs in Current and Constant Dollars for Fiscal Years 1986 Through 1989



Note: Constant dollars were computed by deflating current dollar levels using the consumer price as the deflator.

VA's total assets at the end of fiscal year 1989 were valued at \$35.2 billion—down \$501 million from the previous year. Aside from cash with the U.S. Treasury of \$4.9 billion, receivables of \$3 billion, and future financing sources of \$4.8 billion, VA's major assets were comprised of two major categories. The first category is investments derived primarily from VA's life insurance program. These investments, which amounted to \$13.2 billion at September 30, 1989, are mainly in special non-marketable U.S. Treasury bonds. The second category is property and equipment, which is used primarily to provide medical care to veterans. Although the amount is not considered accurate, based on our audit, the value of property and equipment at the end of fiscal year 1989, as reported by VA, was almost \$8.4 billion.

D-220001

VA's Health Care Costs Growing at Nominal Rate But Could Change

The health care program operated by VA is the nation's largest health care system and includes 172 hospitals, 235 outpatient clinics, 122 nursing homes, and 29 domiciliary care units. All of the hospitals and domiciliary care units and most of the outpatient clinics are organized into 172 medical centers. In addition, VA health care is acquired under contractual and grant arrangements with private and state medical providers. VA's health care program employs over 226,000 full- and part-time health care workers, which is more than 90 percent of VA's total employees.

The cost of operating this health care program increased \$1.9 billion, or 6.3 percent annually, from fiscal years 1986 to 1989, reaching \$11.4 billion. The majority (62 percent) of VA's health care costs are for personnel services and benefits of its approximately 226,000 health care workers—a complement of employees that has remained at about the same level in recent years. Lesser amounts finance the cost of supplies, materials, and contractual services (27 percent) and rent, communications, utilities, depreciation, and other expenses (11 percent).

In recent years, VA has provided fewer episodes of inpatient care in its hospitals while nursing care and other services have increased slightly. Between fiscal years 1986 and 1989, the inpatient occupancy rate of hospitals, as reported by VA, declined from 73.4 percent to 68.8 percent and the average daily census of hospital inpatients declined from 56,940 to 49,040. Meanwhile, the average daily census of nursing home patients increased from 10,482 in fiscal year 1986 to 11,468 in fiscal year 1989. In addition, the daily patient census for domiciliary care units increased from 5,767 to 6,315 during the 4-year period.

Although VA reduced its hospital staffing levels of "full-time equivalent employees" about 9 percent in response to the reduced demand during that period, VA's total staffing of health care workers remained about the same with more workers used for other health care services. Recent appropriations for medical care have specified minimum funding levels for personnel compensation and benefits object classifications. For example, the supplemental appropriations act for fiscal year 1989 (Public Law 101-45) required that not less than \$6.8 billion shall be available for those classifications, and the conference report (H. R. Rep. 101-89) on a related bill directed VA to proceed towards a medical care, full-time equivalent employee staffing level of 194,700. Accordingly, VA's flexibility to reduce the total number of health care workers may be limited.

**Appendix II
Description and Analysis of VA's
Financial Operations**

B-226801

VA spent about \$1.2 billion in fiscal year 1989 to acquire land, buildings, and equipment, most of which was related to providing veterans health care. In addition, VA spent about \$460 million in fiscal year 1989 to maintain its medical facilities. VA hospital construction projects were mostly aimed at replacing, relocating, or modernizing facilities. VA's long-range plans relating to medical facilities call for spending about \$9.8 billion to repair or replace aging facilities.

The declining occupancy rate raises questions about the continuing need for the present size of the aging VA hospital system—many of whose facilities were constructed more than 40 years ago and are deteriorating.

Whether the need for hospital facilities and staffing will continue to be the same as in the past or whether reductions can be made are major considerations in structuring the future alignment of VA's medical facilities. Significant potential may exist for consolidation of hospital facilities and closure of older, less efficient units.

In this regard, in April 1990, VA established a Commission on the Future Structure of Veterans Health Care. The Commission has been charged with reviewing the missions and programs of every VA medical facility to ascertain whether programmatic improvements or enhancements can be realized through facility realignments or major mission changes. Unfortunately, the results of the Commission's work are not expected until late 1991.

**Veterans Benefits Costs
Have Remained Constant
But Face an Uncertain
Future**

Various entitlement programs provide veterans with a number of benefits. Compensation is paid to veterans with disabilities resulting from or coincident with military service and to survivors of service-connected deaths. Pensions are paid to low-income, wartime veterans who are 65 years old or older or who have become permanently and totally disabled, as well as to qualified survivors of deceased wartime veterans. Other veterans benefits cover education, rehabilitation, and burial services.

The cost of operating veterans benefits programs increased an average of 1.1 percent annually for fiscal years 1986 through 1989. For fiscal year 1989, the cost of operating these programs was \$15.9 billion, compared with \$15.6 billion the previous year.

About 96 percent of fiscal year 1989's net operating costs for these programs, or \$15.2 billion, related to disability compensation and pension

Appendix II
Description and Analysis of VA's
Financial Operations

D-120001

benefits. The remaining 4 percent related to other veterans benefit costs, such as education, vocational training and rehabilitation, burial, and clothing allowances.

Two factors could affect the growth (or reduction) of VA's compensation and pension program costs. These factors are the number of veterans who receive benefits and the amounts these veterans receive. Together, these factors have acted to maintain compensation and pension costs at a generally consistent level during the past 4 fiscal years.

The number of recipients decreased an average of 2.1 percent each year from fiscal year 1986 to 1989, whereas the average amount paid per recipient increased about 4 percent annually during that period. The increase in the amount paid to recipients is attributable to cost-of-living adjustments and legislative changes in the amounts paid to recipients.

The effect of these factors is likely to result in VA's annual compensation and pension program costs, at least for the next several years, remaining at levels comparable to those of the last 4 fiscal years unless the benefit amounts are significantly changed through legislation or other action. For example, one area of uncertainty that could significantly affect the amount of annual VA benefit payments involves certain recent court rulings. These recent rulings³ may increase compensation and pension payments by as much as \$1.6 billion annually, which represents 10 percent of benefit payments for fiscal year 1989. If not reversed by a higher court, these rulings would (1) make members of the Philippine Commonwealth Army and recognized guerrilla forces eligible for full U.S. veterans benefits as a result of their U.S. service during World War II, rather than the partial benefits previously provided, and (2) require benefit payments to those Filipino recipients to be paid at the same rates that other recipients are paid, rather than the previous one-half rate paid to those Filipinos.

The present value of the authorized compensation and pension benefits to veterans as of September 30, 1989, which will be payable over future years, is not recorded in VA's financial statements. Federal accounting principles governing the recording of such liabilities are undergoing reexamination by the General Accounting Office (GAO). The present interpretation of this matter by GAO is that disclosure of the estimated

³Quiban v. United States Veterans Administration, 713 F. Supp. 436 (D.D.C.), reconsideration denied, 724 F. Supp. 983 (D.D.C. 1989) and Quizon v. United States Veterans Administration, 713 F. Supp. 449 (D.D.C. 1989).

Appendix II
Description and Analysis of VA's
Financial Operations

B-226801

value of such future benefit payments, or entitlements, is required but need not be recorded in the financial statements. Accordingly, VA has not recorded the liability for such future payments in its financial statements. However, VA disclosed the estimated present value of these benefits, not counting the potential effect of the court rulings relating to Filipino benefit recipients, in the notes to its financial statements. The amount disclosed was \$135.2 billion as of September 30, 1989.

The estimated liability for these future payments is not currently funded. Rather, payments for benefits that become due in a particular fiscal year are financed from that year's appropriation. Therefore, future tax revenues or other resources, such as public borrowings, will have to be made available to finance payments of the future liability as it becomes due.

**Housing Credit Assistance
for Veterans Will Require
Substantial Future
Appropriations**

VA's housing credit program provides for the partial guaranty of home mortgage loans that eligible veterans or qualified survivors of veterans borrow from private lenders. At the end of fiscal year 1989, VA reported more than 3.9 million guaranteed home loans outstanding, with a total face amount of \$152 billion, of which VA had guaranteed about \$60 billion. VA has also extended direct loans to home-buying veterans in certain rural areas where the veterans cannot find commercial lenders. As of September 30, 1989, VA was holding direct loans with a face value of \$1.2 billion, including "vendee" loans, which are direct loans on properties that VA acquired through foreclosure and then resold.

VA's housing credit assistance program can incur expenses or losses in several ways: (1) payments made either to fully satisfy vendor claims or to acquire foreclosed property, (2) expenses paid to maintain and sell acquired property, and (3) losses incurred when foreclosed properties are sold. In addition, losses can be experienced if VA sells its vendee loans for less than the face value of the loans and if it pays for defaults on any of these loans which may have been sold with recourse. Revenues received from such sources as loan origination fees and interest income from direct loans currently reduce housing program losses.

The cumulative net operating losses of VA's housing credit assistance program for fiscal years 1986 through 1989 amounted to \$3.9 billion. Table 2 summarizes the housing program's net income or loss for these years.

**Appendix II
Description and Analysis of VA's
Financial Operations**

B-228861

Table 2: VA's Housing Credit Assistance Program's Net Income or Loss for Fiscal Years 1986 Through 1989

Dollars in millions					
Revenue/expense category	Fiscal year				4-year total
	1986	1987	1988	1989	
Revenues					
Fees	\$258	\$341	\$135	\$141	\$875
Interest income	184	191	168	165	708
Reimbursements	(1)	(45)	(66)	7	(105)
Total Revenues	441	487	237	313	1,478
Operating Expenses*	1,094	2,132	2,032	110	5,368
Net Operating Income (Loss)	(\$653)	(\$1,645)	(\$1,795)	\$203	(\$3,890)

*Fluctuations in the amount of operating expenses were caused by changes in the total provision for losses, which is determined through a statistical methodology based on historical default experience and economic forecasting. The provision for losses increases in those years where adverse conditions occur, such as increasing default rates and adverse statistical and economic indicators, and decreases when the conditions improve. In addition, a decrease occurred in the provision for losses during fiscal year 1989 due to a change, which the auditors approved, in the statistical methodology used to estimate the losses on guaranteed loans.

As of September 30, 1989, \$2.7 billion of the 4-year cumulative net loss of the housing credit assistance program represented estimated accrued loan losses that are payable in the future. VA's financial statements show this net loss as a liability for losses on guaranteed loans.⁴ About \$2.5 billion of this liability will result in a demand on future financing sources.

Appropriations will be required to finance most of this demand. This is consistent with the \$2.3 billion in appropriations and transfers the Congress approved during fiscal years 1986 through 1989 to finance claims and operating expenses for the housing credit assistance program that were in excess of finances generated by the program.

However, because of recent legislative changes in the program, the demand for appropriations or other financing for VA's Loan Guarantee Fund, which is part of the housing credit assistance program, may be even greater in the future. The Veterans Home Loan Indemnity and Restructuring Act of 1989 (Public Law 101-237, Title III) required that, starting in 1990, most new guaranteed or insured loan origination fees

⁴Before fiscal year 1986, VA reported the housing credit program on a budgetary basis, whereby loan losses were recorded as payment was required. Beginning in fiscal year 1986, VA changed to an accrual basis of accounting for loan losses and established a reserve for the estimated cost that it would bear as loans already guaranteed default in the future.

Appendix II
Description and Analysis of VA's
Financial Operations

B-226801

be deposited in a new fund—the Guarantee and Indemnity Fund. The Loan Guarantee Fund will not, therefore, have a significant amount of loan origination fees as a source of financing. These fees amounted to \$875 million during the 4 fiscal years from 1986 to 1989.

Future requirements for appropriations may, however, be eased somewhat if the downward trend in the number of direct and guaranteed loans and in loan defaults experienced in fiscal year 1989 continues. Between fiscal years 1988 and 1989, the number of guaranteed loans outstanding decreased from 4 million to 3.9 million, and the number of guaranteed loans in default dropped from 139,400 to 130,276. The percentage of loans in default during this 4-year period has ranged from 3.2 percent to 3.5 percent.

In addition, the amount of appropriations required for the housing credit program is affected by the number and types of loan sales. VA's experience with loan sales has demonstrated that loans sold with recourse provide a greater amount of initial cash than those sold without recourse. VA's financial advisors for the two without-recourse loan sales in fiscal year 1988 estimated that VA would have increased its initial cash proceeds by about \$200 million had the sales been made with recourse agreements. Thus, using recourse contracts for selling loans could have given the loan guaranty fund a substantial amount of additional cash receipts in fiscal year 1988. This would have resulted in the fund's requiring \$200 million less in appropriated funds for that year.

**Veterans' Life Insurance
Program Is Secure**

VA administers five plans to provide life insurance to veterans of different war eras, including World Wars I and II, and the Korean Conflict. VA also supervises three life insurance plans, operated by commercial insurance companies, which provide coverage to active military personnel and veterans. Of the five life insurance plans that VA administers, only Service-Disabled Veterans Insurance remains open for new policy issues. The other four are no longer writing new policies.

VA's life insurance program receives revenue primarily from life insurance premiums received from policyholders and interest earned on investments. Costs are incurred for this program when it pays claims and dividends to policyholders. In addition, the life insurance program has administrative expenses, but the majority of these costs are paid with VA's appropriated funds and are not allocated to the life insurance program.

Appendix II
Description and Analysis of VA's
Financial Operations

B-220001

Over the 4 fiscal years from 1986 to 1989, the life insurance program, as intended by the Congress, has operated at a near break-even level. That is, revenues generated by the program were generally sufficient to pay benefit payments and dividends to policyholders.

In this regard, the life insurance program's fiscal year 1989 expenses were \$2 million less than receipts—excluding certain unallocated, administrative expenses. During the preceding 3 fiscal years, the life insurance program's expenses were greater than receipts ranging from \$16 million to \$20 million. These differences were largely attributable to the Service-Disabled Veterans Insurance plan, which is intended to receive appropriated funds to finance the portion of policyholders' premiums applicable to the service-connected disability of the veteran. The veteran, or policyholder, pays the standard premium rate for the life insurance coverage. Two other government insurance plans, the National Service Life Insurance and the United States Government Life Insurance plans, also receive limited appropriations for payment of claims traceable to the extra hazards of military service. Table 3 summarizes the results of operating VA's life insurance program during the period from fiscal year 1986 to 1989.

Table 3: Operating Results of VA's Life Insurance Program for Fiscal Years 1986 Through 1989

Dollars in millions				
Revenue/expense category	Fiscal year			
	1986	1987	1988	1989
Revenues				
Premiums	\$848	\$878	\$874	\$871
Interest income	1,166	1,192	1,230	1,274
Reimbursements	(3)	(8)	79	43
Total Revenues	2,011	2,062	2,182	2,188
Expenses and Losses				
Loss reserve provision	191	230	313	222
Claim payments	931	919	933	959
Total Expenses and Losses	1,122	1,149	1,246	1,181
Net Gain Over Expenses	\$889	\$913	\$936	\$1,007
Policy Dividends	\$907	\$929	\$956	\$1,005

VA's life insurance program is in a secure position. Revenues of about \$2 billion have stayed reasonably constant between fiscal years 1986

Appendix II
Description and Analysis of VA's
Financial Operations

B-226801

and 1989—rising about \$200 million during that period. Life insurance program investments, which generated 58 percent of the program's revenue in fiscal year 1989, are principally in special U.S. bonds and experienced an average return of about 9.7 percent in fiscal years 1988 and 1989. However, life insurance premiums, which constituted 40 percent of revenues in fiscal year 1989, are declining as the program has matured. Most veteran policyholders are paying premiums at the capped maximum rate or are no longer required to pay premiums.

In addition, costs related to claim payments and dividends remained steady. For fiscal year 1989, claim payments were about \$959 million, which were slightly higher than claim payments made during the preceding 3 fiscal years. Except for fiscal year 1986, the amounts paid as dividends to policyholders were slightly higher than the amounts paid to life insurance claimants.

VA has provided adequate reserves for future life insurance policy benefits and participating policyholders' interest.⁵ These reserves were \$9.1 billion and \$3.1 billion, respectively, at September 30, 1989. The reserves plus VA's life insurance program revenues are expected to be sufficient to pay future claims and dividends. Thus, VA can expect to maintain its life insurance activities without additional financial assistance from appropriations.

The Congress can anticipate, though, the need to continue funding, through appropriations, the VA life insurance program's unallocated administrative expenses, which were \$27.2 million in fiscal year 1989, and the premium subsidies and certain claims under several government life insurance plans, which were about \$13.5 million in fiscal year 1989.

**VA's General
Administrative Costs Have
Not Grown Significantly**

VA's general administrative costs were \$800 million in fiscal year 1989—about the same amount as was incurred in fiscal year 1988. In addition, about \$1.5 million of general administrative costs is allocated annually to VA's life insurance program to cover certain insurance plans. The remaining general administrative costs are not allocated to the life insurance or other VA programs.

⁵As discussed in our opinion on VA's financial statements (appendix I), VA's current practices will eventually cause the reserve for participating policyholders interest to be distributed to policyholders in the form of dividends or policy enhancements.

Appendix II
Description and Analysis of VA's
Financial Operations

8-120001

The unallocated general administrative costs represent 2.9 percent of VA's total operating costs and increased by \$100 million between fiscal years 1986 and 1989. These unallocated costs are composed of the following types of expenses: salaries and employee benefits (70 percent); rents, utilities, and communications (17 percent); and other expenses (13 percent).

The Congress can anticipate the continuing need to finance VA's general administrative activities through appropriations. However, these costs have not grown significantly in recent years and are expected to remain at comparable levels in the near future.

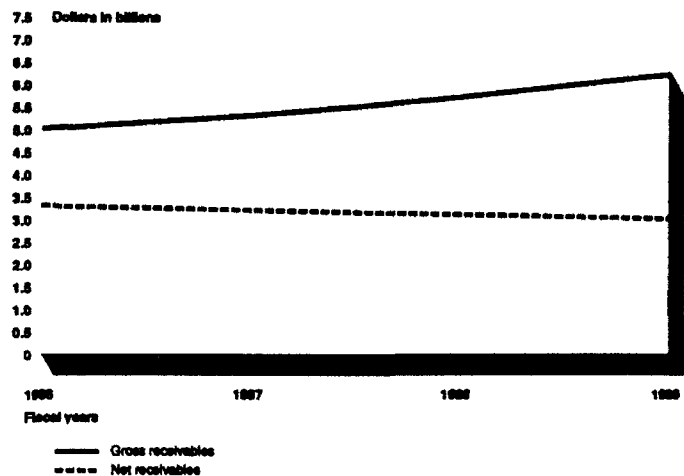
**VA Has Serious Credit
Management Problems**

At the end of fiscal year 1989, VA had \$6.2 billion in amounts due the government from advances and accounts and loans receivable. These assets increased \$1.2 billion from fiscal year 1986 to 1989. VA's allowance for doubtful accounts related to its receivables is considerable, amounting to \$3.2 billion at September 30, 1989. This represents 52 percent of aggregated accounts and loans receivable at that time—a substantial increase from 34 percent in fiscal year 1986. Figure 2 compares VA's total receivables with receivables it expects to collect after considering its allowance for doubtful accounts for fiscal years 1986 through 1989.

Appendix II
Description and Analysis of VA's
Financial Operations

B-226801

Figure 2: VA's Gross and Net
Receivables for Fiscal Years 1986
Through 1989



Note: In this figure, net receivables equal gross receivables less the provision for doubtful accounts. Therefore, the area between the two lines represents the provision for doubtful accounts.

Figure 2 reflects VA's serious credit management problems. In this connection, total bad debt losses for uncollectible accounts and loans aggregated \$3.1 billion for fiscal years 1986 through 1989. Further evidence of VA's credit management problems is indicated by the large percentages of some types of receivables for which VA has established doubtful account reserves. For instance, as of September 30, 1989, about \$775 million was receivable from individuals for amounts due primarily on education loan defaults and compensation and pension benefit overpayments; from third-party insurers for health care; and from veterans for hospital services copayment billings. VA's reserve for doubtful accounts on these assets was 37 percent. As of September 30, 1989, about \$3.6 billion of the \$4.7 billion in loan receivables was for loans due under the housing credit assistance program. VA's reserve for doubtful accounts on the housing credit loans was 73 percent.

5-236801

We have reported on VA's serious credit management problems many times in the past. Most recently, we reported in April 1990^a that much remains to be done to ensure that a comprehensive governmentwide credit management program as set forth by the Office of Management and Budget in Circular A-129 is fully implemented. The report included recommendations to the Secretary of Veterans Affairs for improving VA's credit management.

In that report, we also recommended to the Congress that the Debt Collection Act of 1982 be amended to require agencies, including VA, to use certain credit management techniques. In addition, we recommended that the Congress require agencies to provide it annually with audited financial information on their receivables and delinquencies for its use in making budgetary decisions to supply new funds. As demonstrated in this discussion and analysis and the appendixes to this report, it is important for the Congress to have reliable information on receivables and delinquencies to assess how well agencies, such as VA, are doing in collecting amounts owed to the government and the extent to which these government assets can be collected.

Scope and Methodology

The above discussion and analysis is based primarily on accounting data included in VA's audited consolidated financial statements for fiscal years 1986 through 1989. However, certain analyses required the use of statistical and financial data, such as daily hospital occupancy rates, from other sources. We obtained these data from VA's various budget reports and program systems, which were not subject to our audit and independent verification. Thus, we are not expressing any views on the accuracy of these other statistical and financial data.

Our analysis is focused on the following financial attributes:

- the overall cost of VA's operations and the operating cost of each major program and
- financing sources and their effect on VA's financial position.

We also considered the efficiency of VA's asset utilization and the liquidity and solvency of VA's business-type programs.

^aCredit Management: Deteriorating Credit Picture Emphasizes Importance of OMB's Nine-Point Program (GAO/AFMD-90-12, April 18, 1990).

Appendix II
Description and Analysis of VA's
Financial Operations

B-226801

As previously stated, the information in this report reflects the kind of financial disclosure we believe should be made in an annual report to the President and the Congress by the head of each executive agency and government corporation. Such information reflects accountability for government programs and resources and can be useful for oversight and decisionmaking when assessing department programs and determining public policy. With improved financial reporting as an objective, we plan to continue working with agencies, such as VA, and the Office of Management and Budget to have the issuance of annual audited financial statements permanently adopted as a requirement for all agencies of the federal government.

We are sending copies of this report to the Chairmen of interested congressional committees and subcommittees, the Director of the Office of Management and Budget, the Secretary of Veterans Affairs, and the heads of other federal agencies. Copies will be made available to others upon request.



Charles A. Bowsher
Comptroller General
of the United States

Major Contributors to This Staff Study

Accounting and
Financial Management
Division, Washington,
D.C.

Ronald S. Young, Director, Accounting and Auditing Standards
Bruce K. Michelson, Deputy Director
Frank S. Synowiec, Jr., Assistant Director
Richard Mayo, Senior Accountant

Glossary

Accrual Accounting	A method of accounting in which the financial effects that transactions, events, and circumstances have on an entity are recognized in the period when they occur, rather than when cash is received or disbursed. Thus, accrual accounting recognizes both cash and noncash transactions, such as credit transactions, nonmonetary transfers of goods and services, and other changes in assets and liabilities which do not involve concurrent cash movements.
Budget Decision Unit	A budgeting term which refers to a basic program or organizational entity for which budget requests are prepared. Managers of these units decide amounts to be spent and the scope or quality of work to be performed. (See Joint Financial Management Improvement Program, <u>Core Financial System Requirements</u> , p. A-3.)
Commercial-Type Programs	Federal government programs that earn revenues from selling goods or services. They generally operate as enterprise, revolving, or trust funds and are intended to be self-supporting.
Cash Basis Accounting	A method of accounting that recognizes revenues, expenses, and income when cash is received or disbursed without regard to the accounting period to which the transactions apply.
Common-Size Analysis	A financial analysis technique that expresses elements of a financial statement section in percentage shares. The analyst examines changes over time in the section's composition and in the relative shares of those elements and attempts to find underlying events that may have caused the structural changes. (Charles H. Gibson and others, <u>Financial Statement Analysis</u> , p. 112.)
Cross-Sectional Analysis	A technique of financial statement analysis that compares an entity's financial ratios or other variables with those of other entities or with norms, standards, or industrywide measures.
Causal Factor Analysis	Also referred to as determinant analysis. A technique of financial analysis that attempts to identify elements or factors which affect the entity's revenues, expenses, or general financial condition. The analysis of those factors, or determinants, helps explain and predict changes in

the entity's financial posture. (Robert Berne and Richard Schramm, The Financial Analysis of Governments, p. 79.)

Entitlement Programs	Federal government programs that administer the payment of benefits to persons or units of government that meet eligibility requirements, as established by law.
Financial Attribute	In this study, a distinct aspect, inherent quality, or dimension of an entity that can be expressed in financial terms, such as its liquidity or operating efficiency.
Financial Indicator	In this study, a quantity, such as a ratio, derived from an entity's financial data, that can be used to evaluate the significance, magnitude, or direction of changes in financial attributes of an entity over a specified period. For example, the current ratio (the ratio of current assets to current liabilities) is an indicator of an entity's level of liquidity.
Liquidity	An entity's ability to convert assets into cash, or to obtain cash, to satisfy its short-term financial obligations.
Measure	A quantitative expression of a financial attribute. For example, the net operating cost of a federal agency is measured as its operating expenses, minus revenues and reimbursements, and plus or minus gains or losses in its disposition of assets and liabilities.
Public Service Programs	Federal government programs that are established primarily to provide certain services to the public, either with a nominal fee or without charge.
Revenues	In this study, the amounts that a federal agency program earns for goods or services rendered, but not the appropriated funds received, which are referred to as financing sources.
Solvency	An entity's ability to meet its long-term financial obligations when they become due.

**Trend or Time Series
Analysis**

A technique of financial statement analysis which examines a variable, such as a financial ratio, over time. It is helpful in analyzing trends in the past and forecasting future changes.

Bibliography

Berne, Robert and Richard Schramm. The Financial Analysis of Governments. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1986.

Bernstein, Leopold A. Financial Statement Analysis: Theory, Application and Interpretation, 3rd ed. Homewood, Ill.: Richard D. Irwin, Inc., 1983.

Brace, Paul K., and others. Reporting of Service Efforts and Accomplishments. Financial Accounting Standards Board Research Report. Stamford, Conn.: FASB, 1980.

Budget Issues: Restructuring the Federal Budget—The Capital Component (GAO/AFMD-89-52, August 1989).

Chelimsky, Eleanor. Program Evaluation: Patterns and Directions. Washington, D.C.: The American Society for Public Administration, 1985.

Federal Government Reporting Study: A Joint Study by the Office of the Auditor General of Canada and the United States General Accounting Office (GAO/AFMD-86-30B, March 1986).

Hatry, Harry P., Marita Alexander, James R. Fountain. Elementary and Secondary Education. Government Accounting Standards Board Research Report on Service Efforts and Accomplishments Reporting. Norwalk, Conn.: GASB, 1989.

Helfert, Erich A. Techniques of Financial Analysis, 6th ed., Homewood, Ill.: Irwin, 1987.

Gibson, Charles H. and Patricia A. Frishkoff. Financial Statement Analysis. Boston: PWS-Kent Publishing Co., 1986.

Golembiewski, Robert T. and Jack Rabin, ed. Public Budgeting and Finance. New York: Marcel Dekker, Inc., 1983.

Heath, Loyd C., Financial Reporting and the Evaluation of Solvency. New York: American Institute of Certified Public Accountants, 1978.

Lev, Baruch. Financial Statement Analysis: A New Approach. Englewood Cliffs, N.J.: Prentice Hall, Inc., 1974.

Managing the Cost of Government, Building an Effective Financial Structure, Vol. I and II (GAO/AFMD-85-35 and GAO/AFMD-85-35-A, Feb. 1985).

Bibliography

Musgrave, Richard A. and Peggy B. Musgrave. Public Finance in Theory and Practice. New York: McGraw-Hill, Inc., 1989.

President's Private Sector Survey on Cost Control. Report on the Veterans Administration, 1983.